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THE UNIVERSITY OF ALBERTA

A DESCRIPTIVE AND COMPARATIVE SURVEY OF DROPOUTS
FROM THE ACTIVE TEACHING PROFESSION
IN ALBERTA IN 1965

by

Nicholas Julian Chamchuk

A Thesis

Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirements for the Degree
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FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Descriptive and Comparative Survey of Dropouts from the Active Teaching Profession in Alberta in 1965" submitted by Nicholas Julian Chamchuk in partial fulfillment of the requirements for the degree of Master of Education.

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ABSTRACT

The purpose of this study was to investigate the teacher dropout problem in 1965 and its relationship to the shortage of teachers in Alberta.

The total population of dropouts in 1965 was surveyed by a questionnaire to determine the destinations and reasons given by teachers leaving active service. Additional data were obtained from the Teacher's Report.

The distribution of dropouts to various destinations, the reasons given by teachers for leaving active service, dissatisfactions with teaching, and anticipated re-employment of those experiencing lapses in service were reported.

Selected characteristics of dropouts and their environments were tabulated and compared to the characteristics of the 1964-65 Alberta teaching force. Other comparisons were made of sub-groups categorized according to the type of system in which the dropout was employed.

Losses and recruitment of teachers for the province and for selected types of systems were reviewed, comparisons made, and implications inferred.

Responses were obtained from 1,985 of the 2,541 teachers who resigned in 1965. An estimated 1,648 teachers were dropouts, and represented approximately eleven per cent of the teaching force. Permanent loss to the teaching force was estimated at four per cent, four and one-half per cent

were experiencing avoidable or unavoidable lapses in service within the province, and two and one-half per cent were lost to other provinces and countries. No appreciable movement of teachers to other full-time vocations existed, and teachers experiencing lapses in service did not report appreciable dissatisfaction with teaching.

Characteristics and environments of dropouts were significantly different from those of the teaching force in many aspects.

Significant differences were found in rates of resignation, dropout rates, destinations, and recruitment of teachers in the three types of systems.

It was concluded that individual school jurisdictions experiencing high turnover and loss of teachers might decrease their retention problems by making teaching environments more attractive, although only three per cent of the teaching force might be so affected. It was concluded further, that there was little that might be done provincially to decrease the dropout rate when dropouts were more restrictively defined.

These findings have important implications for agencies concerned with teacher supply in Alberta, and provide new directions for further investigation of changes in the teacher force and teacher shortage.

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CHAPTER I

I. INTRODUCTION

A shortage of teachers for the public schools in the province of Alberta has been consistently reported in Annual Reports of the Department of Education.¹ The severity of the shortage has fluctuated among elementary, junior, and senior high school levels, but has persisted at all levels. It has been particularly acute in non-urban areas and is expected to continue, if not increase, in severity.²

The increase in numbers of teachers required can be attributed to increased enrollments in public schools caused by the population increase and greater retention, changes in pupil-teacher ratios, replacements for normal attrition due to retirement and superannuation, interim replacements for teachers returning for full-time study, replacements for teachers who leave the province, and replacements for teachers who leave teaching.

Sillito and Black reported that in 1964, the "average" school Board in Alberta found it necessary to recruit twenty-five per cent of its staff — six per cent to accommodate increased enrollment, five per cent to replace those teachers

¹Department of Education, Annual Report, (Edmonton: L. S. Wall, Queen's Printer), 1950 to 1966.

²Ibid., 1966, p. 15.

who resigned to teach elsewhere in the province, and fourteen per cent to replace teachers who left active service.³

Ayers predicted that the number of new teaching positions caused by increasing school enrollment would require approximately 700 additional teachers per year, but that the number required would decrease to about 270 by 1970.⁴ In 1964, approximately 1200 teachers entered active service following university studies.⁵ In addition, 470 teachers immigrated into Alberta, about 300 entered service from training at schools other than universities, over 400 re-entered service from housekeeping, and nearly 200 resumed active service following other prior activities.⁶ Although these sources produced a total of 2,500 teachers entering active service in 1964-65, reports of a continued shortage of teachers persisted.

The supply of teachers may be increased by attempting to recruit a greater number of persons into the teaching profession. In addition, the supply may be increased by

³M. L. Sillito and D. B. Black, The Alberta Teaching Force, September 1964, (Research Monograph No. 10. Edmonton: The Alberta Teachers' Association, April 1965), p. 29.

⁴J. D. Ayers, "The Alberta Teaching Force," The ATA Magazine, Special Issue, 45:2, (October 1964), p. 86.

⁵Sillito, op. cit., p. 29.

⁶Ibid.

attempting to decrease the number of teachers dropping out from active service. This study attempts to investigate the teacher population which leaves active service in Alberta.

II. THE PROBLEM

Statement of the Problem

The problem is to determine whether teacher dropouts (that is, those teachers leaving active service) are responsible for the shortage of teachers, the extent of the shortage caused by dropouts, and the possibilities of reducing the dropout rate.

III. DEFINITION OF TERMS USED

Teachers. Teachers consist of the full-time professional employees of public school boards within the Province of Alberta but excludes teachers of private schools, Indian schools, and special provincial institutions such as the School for the Deaf, Correspondence School Branch, Institutes of Technology, etc.

Vocational destination. Vocational destination consists of six categories to which teachers leaving active service in Alberta anticipated entering, viz:

- (a) teaching outside the province,
- (b) housekeeping,
- (c) non-teaching vocation,

- (d) full-time students,
- (e) retired or superannuated, and
- (f) others not listed above.

Teacher characteristics. Teacher characteristics include descriptions of age, sex, marital status, length of experience, length of professional education, and such other characteristics of individual teachers.

Teacher environment. Teacher environment includes the size of the school, grade level and subject area taught, type of position, geographical location, type of school system, and similar information of the school-community situation in which the person was employed.

Dropout. For purposes of this study, a dropout is a teacher who served in the 1964-65 school year but did not intend to resume teaching in Alberta in September, 1965.

Type of school system. School systems were categorized into three types according to size, location, and kind of organization. The first, Large City Systems were restricted to Calgary and Edmonton Public School Districts representing city population centres over 300,000, and employing more than 2000 teachers in 1964-65. Counties and Divisions formed the second category representing the large rural school units in Alberta. The third type included all the Other independent city, town, village or rural school districts, and all Roman Catholic Separate (RCS) districts in Alberta. None of the systems in the third type employed

more than 1000 teachers in 1964-65.

IV. PURPOSES OF THE STUDY

The first purpose of this study was to collect data on the number and characteristics of teacher dropouts to determine whether dropouts are a major cause of the shortage of teachers in the perspective of teacher recruitment and turnover in the province. The second purpose was to examine the dropout rate for various categories of teachers to identify those categories which may be contributing to the teacher shortage. The third purpose was to determine whether rural-urban differences exist in teacher dropout and supply. The fourth purpose was to determine the extent to which opportunities exist to retain a greater proportion of teachers in active service in Alberta.

Specifically, this study attempts to investigate and examine the following:

A. The Dropout Situation in Alberta in 1965

1. How many teachers, and what proportion of the total force left active service in Alberta in 1965?
2. How did the dropout number and rate in 1965 compare with previously reported statistics for Alberta?

B. Vocational Destinations of Dropouts in Alberta in 1965

3. What number and proportion of teachers:

- a. left to teach outside the province?
- b. undertook or returned to housekeeping?

- c. transferred to a non-teaching occupation?
- d. returned to full-time study?
- e. retired or were superannuated?
- f. reported other destinations not listed above?

4. How did the numbers of teachers leaving for each destination compare with the numbers recruited from similar sources?

5. Which categories provided significant net gains to the provincial teaching force? significant net losses?

6. Which categories contributed most to the shortage of teachers?

C. Teachers' Reasons for Leaving Service to Teach Outside the Province, to Become Housekeepers, or to Transfer to Other Vocations

7. What reasons did teachers report for leaving service?

8. What dissatisfactions with teaching did teachers report?

9. What were the future teaching plans of teachers leaving to become housekeepers?

D. Changes in the Teaching Force Resulting from Retirement, Superannuation, and Resumption of Full-Time Study

10. What was the rate at which the teaching force was depleted because of retirement or superannuation of teachers?

11. What number and proportion of teachers were returning to full-time study?

12. What were the future teaching plans of teachers returning to full-time study?

E. Characteristics and Environments of Dropouts

13. Did differences exist between the dropout population and the Alberta teaching force in 1965 in terms of:

- a. years of teacher education?
- b. years of teaching experience?
- c. source of original teacher certification?
- d. age?
- e. sex and marital status?
- f. size of school (number of classrooms)?
- g. grade level?
- h. type of teaching position?
- i. occupation in 1963-64?

F. System Differences

14. Did differences exist between dropout populations of types of systems and provincial dropout populations in:

- a. rate of resignation of teachers?
- b. rate of teacher dropout?
- c. distribution of destinations of dropouts?
- d. losses and sources of teachers?
- e. reasons for discontinuing service?
- f. dissatisfactions with teaching?
- g. plans for future teaching service by teachers returning to full-time study?

V. JUSTIFICATION FOR THE STUDY

Prior reports of teacher movement have suggested that a major contribution to the shortage of teachers in Alberta is made by teachers who leave active service each year. No prior studies have provided detailed information concerning destinations of teachers leaving service, teacher characteristics, or reasons for dropping out. This study seeks to collect and analyze such information to assist responsible agencies in determining directions they can take to decrease the rate of teacher dropouts. Whether there are urban-rural differences in teacher supply problems will be established. Studies documenting the reasons for teacher dropouts and suggesting possible preventive measures are of obvious significance to the persons and agencies concerned with the shortage of teachers in Alberta.

VI. DELIMITATIONS OF THE STUDY

This study is restricted to an investigation of those teachers leaving active service in Alberta in 1965. It is limited to the provincial and type-of-system level; it does not extend to individual school systems, schools or classrooms. The collected data included information on teachers who resigned their positions in 1965 to accept employment as teachers elsewhere in the province. Although such mobility may contribute significantly to the shortage of teachers

experienced by a school system, such data have been excluded from this study.

Some information on the characteristics of teachers leaving service has been documented, but this study does not attempt to appraise changes in the quality of the teaching force caused by dropouts.

CHAPTER II

REVIEW OF THE LITERATURE

The following chapter consists of a compilation and interpretation of statistics on teacher employment, retention, and dropout in Alberta and Canada, and a review of studies of teacher dropout in Alberta and in the United States.

The major sources of information on Alberta were the Annual Reports of the Department of Education, monographs published by the University of Alberta and the Alberta Teachers' Association, and graduate research completed at the University of Alberta. Statistical information on the Canadian problem was abstracted from reports published by the Dominion Bureau of Statistics.

I. STATISTICAL COMPILATIONS AND COMPARISONS

The Size of the Alberta Teaching Force

An immediate problem in the collection and interpretation of statistical data was found in the variation of the number of teachers reported by various sources according to the definition of "teachers", "school", and the time at which the count was made. The investigator hoped to base the rate of dropout on the number of teachers required to staff permanently the classrooms in the province. Different branches of the Department of Education report three

statistics. Other tabulations are made by the Dominion Bureau of Statistics (D.B.S.) and the Alberta Teachers' Association (A.T.A.).

One tabulation of the number of teachers is provided by the "Operation Report" submitted by Superintendents of Schools for September of each year. It lists the number of administrative assistants, full and part-time teachers employed in public schools, private schools, and Indian schools. A mimeographed summary is compiled each year by the Office of the Director of Special Services of the Instruction Division of the Department of Education.

A second tabulation of the number of teachers is provided by the Statistical portion of the Annual Report which lists the number of persons for whom financial grants were made to Boards under the Foundation Program. Teachers in private schools and those teachers who gave service fewer than twenty days, are excluded in this count. Temporary teachers giving twenty or more days teaching service, teachers in Indian schools, teachers in Department of National Defence (D.N.D.) schools and all other locally employed teachers, supervisors, and administrators are included. A count is now also made in October of each year from staff lists provided by school board secretary-treasurers. Discussion with the Administrative Accountant of the Department of Education indicated that the October number is higher than the number of teaching positions occupied if no

turnover of teachers occurred, but otherwise corresponds closely to the number of teachers reported by superintendents on their Operation Report.

A third tabulation is provided by the report of the Registrar in the Annual Report of the Department of Education. The Registrar lists the number of teachers giving service in the province according to the type of certificate held by each teacher. This figure includes teachers of private schools, teachers who taught part of a school year, teachers who taught part-time during a full year, substitute and temporary teachers as well as full-time teachers. It excludes administrators and supervisors who have no classroom teaching duties. The tabulations are made after June of each school year. Considerable duplication can be expected in terms of the number of individual teaching positions occupied during the year, but the figures do indicate the total number of individual teachers serving for one or more days in classrooms in Alberta.

A fourth tabulation is provided by the Dominion Bureau of Statistics report on Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools (Catalogue No. 81-202) published annually. Each year in September, teachers complete a Teacher's Report on Qualifications, Salary and Experience (Form 1302-328) listing extensive data. One copy is forwarded to D.B.S. which records the information on IBM cards. Duplicate sets of

the IBM cards are returned to the Department of Education and the Alberta Teachers' Association and duplicate copies of the form are retained by the Alberta Teachers' Association, and for each jurisdiction by the school board secretary-treasurer, the superintendent of schools, and the secretary of the A.T.A. Local. "Teachers" are defined by D.B.S. as ". . . school principals, and full-time teachers instructing elementary and secondary grades in public school — one teacher for each full-time teaching position." Teachers, supervisors of special subjects and classes, principals, supervising principals, assistant principals and substitute teachers are included provided they are full-time employees receiving an annual salary. Superintendents and inspectors employed by the province or by the larger centres are excluded, as are part-time teachers paid on a daily basis. Teachers in private schools and in special schools operated directly by the provincial government and in Indian schools under Federal Government jurisdiction are also excluded.

A fifth tabulation is provided by the Alberta Teachers' Association. For all teachers employed by public school boards in Alberta, membership is compulsory and is verified by fee lists submitted by the secretary-treasurers of school boards. The A.T.A. counts the number of teachers for whom fees were received by November of each year. This number is inflated by part-time and temporary teachers as

well as substitutes who teach ten or more days in any of the first three months.

In the 1964-65 school year, the number of teachers varied from 14,743 reported by D.B.S. to 16,139 reported by the Registrar, a discrepancy of 1,396 or approximately ten per cent of the teaching force.

The number of teachers reported by each of these sources since 1953 is summarized in Table I. The investigator selected the Operation Report as the most accurate report of the number of teachers required to staff classrooms in the province since each of the other figures reported some inflation due to temporary, part-time, and substitute staff as school progressed during the term.

In-term Turnover

It has been indicated from Table I that considerable turnover of staff occurs between September first and June thirtieth of each school term. This in-term turnover may be caused by teachers who become ill for extended periods, married females who require maternity leave, and by teachers who are found unsuitable for particular positions and are replaced. The Annual Report of the Calgary Public School Board for 1963-64 reported 37 teachers receiving maternity leave (about 1.45 per cent of staff). A letter from the Edmonton Public School Board indicated that about 132 temporary teachers were employed (about 5.0 per cent of staff) for 1964-65.

TABLE I

NUMBER OF ALBERTA TEACHERS REPORTED BY VARIOUS SOURCES,
1953-54 TO 1964-65

Year	Source		DBS	ATA		
	Department of Education					
	Supts'.	Statistics Branch				
Year	Operation Report	Registrar	Oct.	June		
1953-54			7,455	7,470		
1954-55			8,272	7,714		
1955-56			8,815	8,391		
1956-57	8,809		9,273	8,910		
1957-58			9,970	9,702		
1958-59	10,125		10,855	10,855		
1959-60	10,492		11,789	11,071		
1960-61	11,878		12,607	11,762		
1961-62	12,297	12,610	13,342	12,414		
1962-63	12,959	13,392	13,988	13,136		
1963-64	13,930	14,146	14,972	13,844		
1964-65	15,042	14,982	16,007	14,700		
				14,743		

To investigate this aspect further, information was requested from Superintendents of Schools as to the number of temporary teachers employed each year for twenty or more consecutive days, but not on permanent staff; the nature of the replacements; and the destinations of the teachers replaced. Tables II and III provide a summary of the responses received.

It appears that approximately five per cent of the teaching staff starting in September 1964 was replaced before the end of the school year, and that the majority of the teachers leaving did so to raise families. The number of married women who terminated contracts because their husbands secured employment elsewhere was fairly high in city systems, and this category was included as one of the reasons why married women leave teaching in the questionnaire tabulations.

Summary

The number of teachers required to staff classrooms in Alberta was difficult to determine. The number reported to be serving in any one year varied according to the definition of the word teacher, the time at which a tabulation was made, and the agency making the tabulation. The investigator concludes that for purposes of this study the number of teachers was most accurately portrayed by the Operation Report of superintendents of schools in September of each year. The Statistical Branch tabulation in October

TABLE II

EMPLOYMENT OF TEMPORARY TEACHERS IN ALBERTA IN 1964-65
 (EXPRESSED AS PER CENT OF THE TEACHING FORCE
 EMPLOYED IN SEPTEMBER 1964)⁷

Length of Employment	Type of School System				
	City	Public	Counties	Divisions	City RC
For the full year	1.05	0.41	1.09	1.12	
Part of the year	3.45	4.15	5.28	3.50	
Total	4.50	4.56	6.37	4.62	

⁷ Tabulations are from responses received from all city public systems, 21 out of 28 counties, 21 out of 31 divisions, and 6 out of 9 city RCS systems.

TABLE III

DESTINATIONS OF TEACHERS REPLACED BY TEMPORARY TEACHERS
(EXPRESSED AS PER CENT OF TEACHERS LEAVING DURING
THE SCHOOL TERM)⁸

Destination	Type of System				
	City	Public	Counties	Divisions	City RC
Housekeeping (pregnancy, maternity leave, etc.)	42.2		43.7	34.5	42.8
Retired due to illness	19.8		40.2	27.2	28.6
Transfer because of husband's employment	20.3		3.5	14.7	11.9
Others	17.7		12.6	23.6	16.7

⁸Tabulations are from all city public districts, 21 out of 28 counties, 21 out of 31 divisions, and 6 out of 9 city RCS systems.

reflected inflation by the number of additional part-time teachers employed and by the number of persons employed, rather than the number of full-time teaching positions. The A.T.A. tabulation reflected further inflation by temporary and substitute teachers giving service for ten or more days before the end of November of the school term. By June of each year, the Registrar's tabulation indicated that approximately five per cent of the September force had been replaced and an additional five per cent had given service as substitute and temporary teachers for one or more days. The number of teachers actually employed during the school year was ten per cent higher than the number of teaching positions occupied in September.

Teacher Retention in Alberta

MacArthur and Lindstedt, in a survey prepared for the Royal Commission on Education in Alberta, found that many teachers had lapses in service, leaving the profession for a few years and then returning to it.⁹ A lapse of five to nine years of service was reported for 14.3 per cent of the teaching force employed in 1957-58, whereas no lapse in teaching service was reported for only 44.0 per cent. Of the teachers for whom lapses were reported, marriage or

⁹R. S. MacArthur and S. A. Lindstedt, "The Alberta Teaching Force in 1957-58," (Monographs in Education No. 3. Edmonton: University of Alberta, 1960).

homemaking accounted for 30.5 per cent, further study accounted for 8.5 per cent, employment in non-teaching occupations accounted for 6.5 per cent. The remaining 10.5 per cent reported other reasons.¹⁰ It was evident that teaching careers were frequently interrupted for many teachers.

MacArthur and Lindstedt also studied teacher movement over a four-year period.¹¹ The average turnover of teachers employed by each Board was 28 per cent. While turnover of staff for a Board meant a loss and that a new teacher had to be recruited, some of these teachers took other positions within the province. The provincial loss of teachers due to resignations was only 20 per cent. Of replacements for the teachers forming the 20 per cent loss to the province, 6.8 per cent came from teacher training institutions, 3.3 per cent came from outside the province and 9.6 per cent came back into teaching after a lapse in teaching service. The increase in the teaching force was approximately five per cent in 1958.

Table IV shows the relative distribution of future mobility of teachers by categories of employing boards as reported by MacArthur and Lindstedt.

Few teachers reported long-term service with a particular board. Of 9,420 teachers reporting, only 56.7 per cent

¹⁰ Ibid., p. 39.

¹¹ Ibid., pp. 42-49.

TABLE IV

FUTURE INTENTIONS OF TEACHING SERVICE
BY TEACHERS EMPLOYED IN 1957-58.¹²
(EXPRESSED AS PER CENT OF
TEACHERS EMPLOYED BY
EACH TYPE OF SYSTEM)

Intention	Type of System		
	Divisions and Counties	Cities	Independent Districts
Intending to teach until retirement	32.7	45.5	39.4
Not intending to teach until retirement	20.2	18.6	18.1
Uncertain	47.1	35.9	42.5

¹²Compiled from MacArthur, op. cit., pp. 44-47.

had been teaching for the same board two years previously. Only 38.4 per cent were certain that they would teach until their retirement, and 19.5 per cent were certain that they would not teach until retirement. In Counties and Divisions, fewer teachers were certain that they would teach until retirement, and more were certain that they would not teach until retirement. It was evident that teaching was not intended to be an uninterrupted career by many beginning teachers.

Item 49 of MacArthur's questionnaire asked the teacher what his intentions were for the following year.¹³ Approximately 85 per cent intended to continue teaching in Alberta. Of those leaving, 1.5 per cent intended to teach elsewhere, 1.4 per cent intended to return to university, 3.9 per cent intended to return to housekeeping, and 7.9 per cent intended to undertake other occupations.

Clarke and others undertook similar studies of the Alberta teaching force for 1961-62 and 1962-63.¹⁴ They found that the teaching force was increasing at the rate of seven per cent per year and that the average board had to recruit twenty-three per cent of its staff each year.

Sillito and Black, compiling statistics for 1963-64

¹³MacArthur, op. cit., pp. 48-49.

¹⁴S. C. T. Clarke, et al., The Alberta Teaching Force, September 1962, (Research Monograph No. 7. Edmonton: The Alberta Teachers' Association, March 1964), pp. 27-28.

and 1964-65, determined that the average board must recruit twenty-five per cent of its force each year.¹⁵ A dropout rate ranging from 11.59 per cent in 1962 to 12.59 per cent in 1964 was reported.

It can be concluded that the teacher force in Alberta is subject to considerable change from year to year due to turnover in staff. Substantial numbers of teachers experience lapses in service and many who undertake service initially seem not to be committed to teaching as a continuing career. Both of these conditions contribute to the turnover and shortage of teachers. The studies cited provided information only on the numbers of teachers involved in turnover of staff. This study seeks to determine what proportion of such teachers might be retained in active service, and to identify the factors which might decrease the rate of attrition.

Comparisons of Dropout in Alberta and Canada

For purposes of comparing the dropout rate in Alberta with that of other provinces and Canada, information was compiled from reports of the Dominion Bureau of Statistics.

It is evident from Table V that Alberta has recently experienced an average loss rate of approximately eleven per cent. The Dominion Bureau of Statistics consistently

¹⁵Sillito, op. cit., p. 29.

TABLE V

DROPOUT OF TEACHERS, CANADIAN PROVINCES AND ALBERTA, 1956 TO 1964
 (EXPRESSED AS PER CENT OF THE TOTAL TEACHING FORCE
 EMPLOYED IN THE PREVIOUS YEAR)¹⁶

Year	Alberta	Canadian Average	Range of Provincial Rates
1956	11.8	12.7	10.7 - 23.4 ²
1957	9.3	11.7	9.0 - 24.2 ²
1958	18.4	13.7	12.3 - 23.3 ³
1959	Not Reported by D.B.S.		
1960	12.8	14.5	12.8 - 31.9 ²
1961	11.5	14.0	11.0 - 24.7 ²
1962	11.6	11.4	9.1 - 24.7 ⁴
1963	11.3	11.7	9.6 - 24.8 ⁵
1964	11.6	11.9	9.5 - 23.7 ³

² Except Ontario and Quebec.

³ Except Quebec.

⁴ Except Quebec, Prince Edward Island, New Brunswick.

⁵ Except Quebec, New Brunswick.

¹⁶ Compiled from D.B.S. Catalogues 81:202, 1956 to 1964.

states that Alberta has been a chief beneficiary of the losses of eastern provinces by migration of teachers from those provinces and from outside Canada to Alberta.¹⁷

II. DROPOUT STUDIES

Studies in Alberta

There exists only one prior study concerned with determining the reasons why teachers discontinue service in Alberta.

Murray conducted a survey to determine the "annoying and frustrating experiences" which caused some 500 teachers to quit teaching in 1954.¹⁸ Two hundred twenty-one replies to his questionnaire were tabulated.

The 31 single females replying complained of high enrollments in classes, uncomfortable and poorly equipped schools, and primitive living conditions. Sixty-six married females indicated that pressure of family obligations or the lack of adequate living accommodation near schools caused them to resign. The 124 males reported that low pay and low prestige of the profession caused them to leave.

¹⁷ Dominion Bureau of Statistics, Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools, (Catalogue 81:202, Ottawa: The Queen's Printer), 1956 to 1964.

¹⁸ Thomas H. Murray, "An Investigation of the Reasons Why Teachers Leave Teaching", (unpublished Master's thesis, The University of Alberta, Edmonton, 1955).

All three categories recommended increased salaries and increased teacher qualifications as the first two improvements necessary. Males ranked improved prestige as the third most important change desirable while single females wanted classroom enrollments to be limited.

A direct relationship between length of teacher training and length of service was established for single females. The relationship was not as distinct for single males or married females and tended to be inverse for the married males, although a number had given between ten and fifteen years of service before leaving. It seemed that single males found it easier to convert to other vocations than did other teachers.

Economic factors were not felt to be important by married females, many of whom indicated an intent to return to active service if competent help for their homes could be obtained. Others planned to return when their children reached school age.

The questionnaire made no provision for responses from teachers who may have enjoyed teaching or who may have been noncommittal. Neither was evidence gathered from drop-outs caused by general population mobility although Murray reported that many teachers had emigrated to British Columbia.

Murray quoted the C.E.A. Committee on the Status of the Teaching Profession which reported its impression from

the results of an opinionnaire of sample teacher populations in each province.¹⁹ The committee reported that a need existed to hire special teachers for social and community work and adult education; that more clerical and stenographic assistance was desirable; that salaries were too low; living conditions in rural areas were unsatisfactory; schools were dingy, uncomfortable and equipment inadequate; classes were too large, and teaching loads too heavy. The committee reported that fifteen per cent of the teachers responding to the questionnaire indicated that they were using the teaching career as a stepping stone or had entered because of low entrance requirements.²⁰

In summary, the studies and statistics cited indicate that teacher dropouts in Alberta were dissatisfied with their positions or teaching careers. Married female teachers left teaching completely or had lapses in service because of family responsibility. Rural teachers seemed less likely to make teaching a continuous career. The problem of teacher dropouts was not unique to Alberta. Alberta seemed to be favored with average rates of dropout, and was a chief beneficiary of teachers who terminated services in

¹⁹M. E. Lazerte, et al., An SOS from the Schools, Report of the Canadian Education Association's Committee on the Status of the Teaching Profession, 1948, cited by Thomas H. Murray, op. cit., p. 3.

²⁰Murray, op. cit., p. 8.

other provinces and other countries. This study attempts to document further the extent, causes, and circumstances surrounding teacher dropouts.

Studies in the United States

Recent studies in the United States have been concerned with persistence in teaching by beginners and experienced teachers, identification of causes of turnover and dropout, and attempts to predict characteristics which contribute to teacher retention.

Persistence in Teaching

Wolf and Wolf, in an intensive survey of teacher dropout in 1963-64 reported that for every 100 students satisfying state certification requirements, only 60 entered classrooms.²¹ Between ten and fifteen per cent dropped out after the first year of professional experience and a similar proportion dropped out after the second year. They reported that only twelve to fifteen per cent of the teachers were still in service after ten years. It appears that the Alberta dropout rate is much smaller than that in the United States. Further, it appears that in both Alberta and the United States there exist large numbers of people who possess a valid teaching certificate but who are not teaching.

²¹ Willavene Wolf and William C. Wolf Jr., "Teacher Dropouts: Still a Dilemma", School and Society, 92:193-4, April 18, 1964.

Maul, Assistant Director of the NEA Research Division, conducted eighteen national studies of teacher supply and demand in elementary and secondary schools in the U. S. A.²² His major finding was that the number of new graduates eligible to teach was larger than the total of new teachers employed. In 1965, of 2,515 teachers certificated in Wisconsin, only 54 per cent became teachers in that state. Another 19 per cent taught elsewhere, leaving 27 per cent who did not enter service. Further he reported a selective shortage according to the type of school and community, region, grade level and subject area, and that teacher supply was extremely vulnerable to changes in kindergarten education and other special programs.

McLeod in a doctoral dissertation in 1964, followed up the persistence in teaching of 174 male graduates of the 1958-59 class of the College of Education of the University of Minnesota.²³ Of the 126 respondents, 25 were not teaching five years after graduation. Those who did persist were reported satisfied with teaching and had salary increases of approximately \$600.00 per year.

Nyman, in a study of dropouts after the first year

²²R. C. Maul, "Both a Teacher Shortage and a Surplus Exist," Wisconsin Journal of Education, 98:14, March, 1966.

²³Robert Nathan McLeod, "Persistence in Teaching Among Male Special Area Graduates in Education," (unpublished doctoral dissertation, University of Minnesota, 1965) Dissertation Abstracts, XXVII, No. 4, October 1966, p. 985-A.

of service, followed up 422 subjects from their last year of professional preparation.²⁴ He reported that 261 entered teaching, but only 198 indicated a desire to stay after the first year of service.

Garford reported a turnover of 17 per cent among beginning teachers in New York.²⁵ He quoted a study completed by Mason in 1961 which reported that 51 per cent of the first-year teachers did not expect to be teaching five years later, even though they were generally satisfied with their work.

Nelson and Thompson reported a number of factors causing teachers to leave active service after one year.²⁶ Among the reasons for leaving they listed low salaries, heavy teaching loads for first-year teachers, little choice of assignments for beginning teachers, onerous non-teaching chores, inadequate supervision of beginning teachers, placement of problem students with beginning teachers, and lack of protection from undesirable community and citizen pressure groups.

²⁴ Ernest Leslie Nyman, "A Study of Drop-outs Among Beginning Teachers." (unpublished doctoral dissertation, University of California at Los Angeles, 1965) Dissertation Abstracts, XXVI, No. 7, January 1966, p. 3771.

²⁵ Gordon G. Garford, Review of Educational Research, 33:385, October 1963.

²⁶ R. H. Nelson and M. L. Thompson, "Why Teachers Quit," Educational Digest, 29:12-15, September 1963.

It appears from the reports cited that teaching as a profession is vulnerable to a high dropout rate from those causes which could be categorized as avoidable as well as unavoidable.

Causes of Turnover and Dropout

Greene surveyed turnover of secondary teachers in the central schools of New York State for 1961-62.²⁷ He reported a turnover range from zero to 66 per cent, with an average rate of 11.59 per cent for 348 schools. The possibility of turnover was found to be most acute during the first three years of a teacher's service. Reasons for turnover included withdrawal, resignation, dismissal, promotion, and other causes. It was found that most teachers changed positions of their own volition — dismissal was not significant. Those who withdrew did so for family reasons or to gain further education. Resignations were given by those teachers who could obtain better positions or salaries. Those who indicated promotions went to college teaching and "professional advancement". Greene decided that over 50 per cent of the turnover was avoidable. He reported that teacher dissatisfaction with the administration, the school, and the community was much greater than the administrators'

²⁷ George Elwin Greene, "The Extent and Causes of Turnover Among Secondary School Teachers in the Central Schools of New York State for the Year 1961-62," (unpublished doctoral dissertation) Dissertation Abstracts, XXV, Part 3, 1964-65, pp. 4493-4.

responses showed. Although the dissatisfaction resulted in teacher turnover, the teacher's solution to the problem was usually to seek another position within the profession.

Thomas, in an Ohio study, concluded that most women left for extrinsic reasons such as pregnancy, marriage, and job transfer of husbands.²⁸ Over 90 per cent of those who left for such temporary reasons expressed a desire to return to teaching when possible. In contrast, men left because of dissatisfactions which were avoidable: low salaries, lack of opportunity for promotion, unsatisfactory grade level or subject area assignment.

In a study cited earlier, Wolf and Wolf recommended that salaries be raised, working conditions be improved, status be raised, and preference for teaching candidates be oriented towards married males, self-supporting females, and females who would combine marriage with a career in teaching.²⁹ They felt that "young attractive females" may be poor risks for long-term career teaching service.³⁰

Garford cited a study by Kleinman in 1960 who found a

²⁸ Warren Felty Thomas, "A study of Factors Associated With the Retention of Teachers in Selected Public School Systems in Cuyahoga County, Ohio," (unpublished doctoral dissertation), Dissertation Abstracts, XXV, Part 4, 1964, pp. 6358-9.

²⁹ Wolf, op. cit., p. 193.

³⁰ Ibid.

significant positive correlation between the previous knowledge by the beginning teacher about his conditions of employment, and his satisfaction with his work.³¹

A recapitulation of these studies and reports indicates that considerable dropout of staff can be anticipated in early years of service. Females leave because of extrinsic reasons but are willing to return to later service. Males leave because of dissatisfaction with their teaching situations, especially salary and status. New teachers appeared to receive the more difficult and less desirable assignments, frequently leading to dissatisfaction with teaching as a career. The present study will attempt to determine the extent to which such circumstances exist for teachers in Alberta.

Predictive Studies

Nyman used the Minnesota Teacher Attitude Inventory and Hilton's "Ego-Involvement" Index in an attempt to predict teachers who would stay in service.³² He reported the following characteristics of those teachers who indicated intentions to continue service: approving attitudes towards the schools, curriculum and teaching; a positive attitude towards students; good mental hygiene; a well-developed

³¹Garford, op. cit., p. 385.

³²Nyman, op. cit., p. 3771.

concept of the teacher; and good control over students.³³

McLeod examined the scores of teachers on five independent variables: The Cooperative English Test, the Miller Analogies Test, the Cooperative Reading Test, the American Council on Education Psychological Examination, and the Minnesota Teacher Attitude Inventory.³⁴ He found no significant difference on the psychometric and academic variables between the "persists" and "non-persists". Further, he concluded that there was little evidence that persistence can be predicted from these five variables.

These studies indicate the difficulties which may be encountered in attempts to predict those teachers who will dedicate themselves to long service in the profession.

Summary

The American studies indicate considerable lack of commitment to long-term teaching service by many persons who take teacher training. Dropout seemed most likely to occur during the early years of service and was attributed to low salaries, unsatisfactory teaching assignments for beginning teachers, onerous non-professional chores, and interference by lay pressure groups. Married women withdrew from service for extrinsic reasons associated with family responsibilities.

³³ Ibid.

³⁴ McLeod, op. cit., p. 985-A.

Attempts to predict persistence in teaching service from scores achieved on various tests were unsuccessful. This study attempts to appraise the factors associated with drop-out in Alberta.

CHAPTER III

PROCEDURE

This chapter describes the dropout population, the sources, collection and treatment of the data.

The Questionnaire Population

For the purposes of this study, the population to which the questionnaire was distributed included all teachers who resigned in May and June of 1965. Data were gathered for teachers who resigned from one employer to take new teaching positions elsewhere in the province but such data was excluded from this report. The dropout population consisted only of those teachers not intending to resume employment as teachers with other employers in Alberta in 1965.

Sources of Data

The two sources of data were information obtained from the Teacher's Report (Form 1302-328) completed by each teacher in September, 1964, and responses to the questionnaire distributed to each teacher in Alberta who resigned in May or June, 1965.

When the investigation of the problem was undertaken in April, 1965, it was anticipated that information on teacher movement would be available from numerous sources. Superintendents of schools prepare an annual report to the

electors of their jurisdictions and include some data on teacher loss. Unfortunately, a survey of a number of reports collected for the 1964 financial year proved of little value since many reports omitted the desired data.

An attempt was made to trace teachers who had left service through the A.T.A. membership list. A list of 2,394 teachers who were active members in 1963-64 but inactive in 1964-65 was prepared. The names of teachers who had retired, deceased, returned to further study, or for whom a Teacher's Report could not be located were deleted from the list and questionnaires sent to the remaining 1,767. Of these, 394 questionnaires were returned by the post-office as non-deliverable because forwarding addresses could not be determined. A further 214 were returned by teachers who had resumed service by May, 1965. An additional 156 were returned by students not identified as such earlier. Only 690 usable questionnaires were returned (39 per cent) and no response was received from the remaining 340. This attempt made it evident that teacher dropouts were difficult to trace after termination of their duties, and an alternative procedure was implemented for the 1965 study.

The investigator decided to limit the questionnaire to those items of data directly related to the resignation of the teacher and to obtain information on the characteristics and environment of the teacher from the Teacher's Report. Although this procedure greatly increased the

amount of work that had to be done by the researcher, it enabled the questionnaire to be restricted to a minimum number of items and a short completion time by the respondent. This was considered especially important because of the busy time of the school term during which teachers would be requested to respond. An identification procedure was devised to assure anonymity of individual responses, yet allow identification for compilation of additional data and identification of the school jurisdiction.

The questionnaire was designed to include the following five categories of information:

- (1) teacher's destination for 1965-66,
- (2) reason for resignation,
- (3) intent (if any) for future service in Alberta,
- (4) areas of dissatisfaction with teaching, and
- (5) anticipated changes as a result of changing employers.

It was not expected that all teachers would answer all sections. A detailed description of each section and justification for each item is found in Appendix A.

Each school jurisdiction was given a code number and serialized numbers were placed on the questionnaire response envelope. Superintendents of schools were forwarded a supply of questionnaires and return envelopes, and a form on which to register the names of teachers who resigned prior to June 15th of 1965. As each teacher resigned, the

superintendent was instructed to forward him a questionnaire, record his name and questionnaire number on the list, and indicate the probable destination of the teacher resigning. The lists of names and identification numbers were returned to the investigator by June 3rd for those resigning on or before May 31st and by June 20th for those resigning on or before June 15th. The data collected included information on teacher mobility within the province, since such information was considered important to individual boards experiencing teacher losses. As indicated earlier, mobility within the province was excluded from the domain of this study.

Excellent cooperation was provided by all superintendents, and the names and identification numbers of 2,541 teachers were established.

In the third week of June, postcard reminders were mailed to each teacher who had resigned but had not yet returned the completed questionnaire. A second follow-up card was forwarded in the last week of June.

July thirtieth was established as the deadline for inclusion of questionnaire responses.

As the school jurisdiction and name of the teacher resigning were established, environmental data was obtained from the Teacher's Report of Salary, Qualifications, and Experience (Form 1302-328) completed by that teacher in September 1964. The following items from the Teacher's

Report were recorded on data cards for each teacher who resigned:

- (a) school district, division or county
- (b) name of teacher and postal address
- (c) number of classrooms in the school
- (d) number of teachers on the school staff
- (e) sex of teacher
- (f) marital status
- (g) type of certificate held
- (h) origin of initial certification
- (i) years of experience outside the province
- (j) type of teaching position (regular teacher or other)
- (k) percentage time spent in teaching or administration
- (l) grades taught
- (m) enrollment of the home room
- (n) years of experience
 - i. with present board
 - ii. elsewhere in the province
 - iii. outside the province
 - iv. total
- (o) salary
- (p) occupation in 1963-64
- (q) year of birth
- (r) number of years of teacher education

As questionnaires were returned, the code number of the envelope was matched with the identification number of the data card. The responses to questionnaire items were coded and recorded on the data cards. The information on

the data cards was then punched onto IBM cards for processing.

Treatment of the Data

Frequency distribution tables were prepared for those questions which could be answered by reports of information. Where such information was related to numerical comparisons with the provincial teaching force, the data figures were extrapolated on the assumption that the eighty per cent return of the questionnaire was representative of the study population. Frequency distribution tables were reported in Appendix D and selected tables included in Chapter IV.

Chi square values were used to test the significance of differences between dropout distributions according to teacher and environmental characteristics and the distributions which would be expected assuming that the characteristics and environments of dropouts were representative of those of the provincial teaching force. The statistical procedures follow those described by Ferguson.³⁵ Similarly, comparisons were made between type-of-system dropout distributions and distributions for the provincial dropout population. Contingency tables were prepared where necessary. Null hypotheses were rejected and alternative hypotheses

³⁵George A. Ferguson, Statistical Analysis in Psychology and Education, (Toronto: McGraw Hill Book Company, Inc., 1959), pp. 165-169.

accepted when the observed values of chi square exceeded those critical at the .05 level for the appropriate number of degrees of freedom. Contributions to the value of chi square by rows or cells were investigated and significant differences identified using the interpretation of an obtained chi square suggested by Guilford.³⁶ Contingency tables and reports of the calculated values of chi square are reported in Appendix E, while the results and interpretations are reported in Chapter IV.

³⁶J. P. Guilford, Fundamental Statistics in Psychology and Education, (Toronto: McGraw Hill Book Company, Inc., 1965), p. 232.

CHAPTER IV

FINDINGS OF THE STUDY

I. QUESTIONNAIRE RETURNS AND POPULATIONS INCLUDED IN THE STUDY

The populations included in the study are reported in Table VI. The teaching population represented 98.86 per cent of the 15,042 teachers reported by superintendents to be employed in September 1964. The resignation population consisted of all 2,541 teachers who resigned by June 15th, 1965 as reported by superintendents. Data for this study were collected from 1,984 teachers who had resigned, who had completed and returned questionnaires, and for whom Teacher's Reports were located for the additional data, representing 78.08 per cent of the teachers who resigned in 1965.

Rate of Resignations

The 2,541 teachers who resigned in 1965 represented 17.09 per cent of the 1964-65 teaching force. Large city systems experienced a resignation rate of 9.45 per cent with a range from 7.9 per cent to 11.0 per cent. Counties and divisions experienced a resignation rate of 21.74 per cent with a range from 12.7 per cent to 40.0 per cent. Other independent districts experienced a resignation rate of 19.56 per cent; their range was not tabulated.

TABLE VI

NUMBER AND RATE OF RESIGNATIONS AND QUESTIONNAIRE RESPONSES
ACCORDING TO TYPE OF SCHOOL SYSTEM

Type of System	Resignations			Questionnaire Returns	
	Number on Staff, 1964-65	N	Per Cent of Staff	N	Per Cent of Resignations
Large City	4,959	469	9.45	342	72.92
County and Division	6,127	1,332	21.74	1,086	81.53
Other Districts	<u>3,784*</u> 3,956	740	19.56	556	75.13
Total	<u>14,870</u> 15,042	2,541	17.09	1,984	78.08

* The study included 3,784 of the 3,956 teachers employed by independent districts. Information was not available from a number of small isolated independent districts.

II. DROPOUT RATES

Dropout rates are reported in Table VII. The number of dropouts in Alberta was 1,648, representing 11.08 per cent of the teaching force. The rate varied from 7.30 per cent for large city systems to 12.75 per cent for counties and divisions, and 13.35 per cent for other independent districts.

The dropout rate in 1965 was slightly lower than the range from 11.3 per cent to 11.6 per cent reported for the previous four years in Table V, page 24. The rate was considerably below the 14 per cent reported by Sillito (p. 1) and used by Ayers (p. 2) in projecting teacher needs for future years.

III. DESTINATIONS OF DROPOUTS

The destinations of dropouts are reported in Table VIII. Approximately one-third of the dropouts were undertaking or returning to housekeeping, one-fifth were returning for further study, and one-fifth were leaving to teach outside the province. Retirement and superannuation accounted for less than one-tenth of the dropouts. Other destinations were reported by one-eighth of the dropouts.

Provincial Dropout and Recruitment

The number of teachers reported to be recruited by September 1965 is reported in Table IX in comparison to

TABLE VII

NUMBER AND RATE OF DROPOUTS ACCORDING TO TYPE OF SCHOOL SYSTEM
(EXPRESSED AS PER CENT OF STAFF EMPLOYED)

Type of System	Dropouts	
	N	%
Large City	362	7.30
County and Division	781	12.75
Other Districts	505	13.35
Province	1,648	11.08

TABLE VIII
FREQUENCY DISTRIBUTION AND PER CENT OF
DROPOUTS BY DESTINATION

Destination	N	Per Cent of Dropouts	Per Cent of Teaching Force
Full-time study	360	21.84	2.42
Housekeeping	537	32.58	3.61
Other vocations	82	4.98	0.55
Retired, etc.	120	7.29	0.81
Emigrating	345	20.93	2.32
Other destinations	168	10.19	1.13
Unknown	36	2.18	0.24
Total	1,648	100.00	11.08

TABLE IX

FREQUENCY DISTRIBUTION OF DROPOUTS BY DESTINATION AND
REPORTED RECRUITMENT IN SEPTEMBER 1965³⁷

Category	Dropouts	Recruitment	Net
Teaching Staff, September 1964			15,042
Full-time Study	360	1,574	+1,214
Housekeeping	537	541	+4
Other Vocations	82	66	-16
Retired, etc.	120	-	-120
Emigrating	345	598	+243
Other Destinations	204	79	-125
Total, September 1965	1,648	2,858	16,252

³⁷ Recruitment data were compiled from the Teacher Recruitment Report, Department of Education (Mimeo., October 1965).

dropouts. The table indicates a net increase of 1,210 teachers between June and September. Major gains were made in the number of teachers entering service following university study, and immigration into Alberta. The net gain from these two sources was 1,457 teachers. The number of teachers undertaking housekeeping corresponded closely to the number recruited from housekeeping, and the number lost to other vocations was slightly less than the number recruited from other vocations. The net loss associated with these two categories was 12 teachers. Losses due to retirement and superannuation were 120 teachers and for other destinations were 125 teachers. The total net loss for these four categories was 257 teachers. Provincially, attrition due to retirement and superannuation and teacher loss for "other" destinations provided the only appreciable net losses of teachers. In contrast, the 1,574 teachers newly entering or returning to service from full-time study was sufficient to replace the 257 teachers lost because of retirement, superannuation, and other reasons, to provide replacements for the 360 teachers returning to study, to supply the estimated 700 additional teachers needed to expand the teaching force because of pupil enrollment growth, and to provide more than 300 teachers to relieve the shortage. The additional net gain of 243 teachers from immigration provided a total theoretical surplus of 554 teachers to relieve the shortage.

IV. REASONS FOR DROPOUT

The reasons given for leaving service were examined for dropouts emigrating from the province, undertaking or returning to housekeeping, and transferring to other vocations. The frequency of responses is summarized in Table X. Rates less than three per cent were not tabulated in the summary.

Emigrants

Over twenty per cent of dropouts leaving the province indicated that they were married women whose husbands had transferred to new employment. Dissatisfactions accounted for approximately twelve per cent of the emigrants, and expiration of teaching authority for approximately four per cent. Nearly forty per cent reported other reasons for resigning, and nearly twenty-five per cent did not respond.

Housekeepers

Over twenty-six per cent of the dropouts entering housekeeping indicated its priority over their teaching career. Nearly ten per cent were returning to housekeeping because their husbands had been transferred to new job locations. Dissatisfaction, lapse of certification, pregnancy, and entry into other vocations each accounted for about four per cent of these dropouts. Other reasons were reported by 6.7 per cent, and 38.6 per cent indicated no response.

TABLE X

REASONS FOR DROPOUT GIVEN BY EMIGRANTS, HOUSEKEEPERS
AND TEACHERS ENTERING OTHER VOCATIONS³⁸
(EXPRESSED AS PER CENT OF TEACHERS
REPORTING EACH DESTINATION)

Reason	Destination			
	Emigrants	Housekeepers	Others	Total
Entering non-teaching positions in education	-	-	4.7	-
Entering non-education vocations	-	-	40.6	5.5
Employment expired, resignation requested or terminated after probationary year	-	-	-	-
Certificate lapsed	4.2	4.1	4.7	4.2
Dissatisfaction with teaching or position	12.8	4.1	31.2	9.5
Married, housekeeping receiving priority	-	26.6	-	15.0
Pregnant	-	3.4	-	-
Married, husband transferred	21.2	9.1	-	12.7
Other	38.5	6.7	9.4	18.2
Not reported	23.0	38.6	3.1	30.0
Total Tabulated	99.7	96.2	96.8	95.1
Number of Teachers	345	537	82	964

³⁸ Compiled from Tables D.2 to D.5 of Appendix D.

Other Vocations

Of the eighty-two teachers leaving for other vocations, 31.2 per cent were dissatisfied with teaching and 9.4 per cent reported other reasons. Approximately forty per cent simply indicated that they were changing vocations.

Dissatisfactions with Teaching Service

The proportion of teachers indicating dissatisfaction with various aspects of the teaching or environmental situations is summarized in Table XI. Provincially, more teachers expressed complete satisfaction with their teaching position than expressed any single category of dissatisfaction. Inadequate salary was expressed as an important reason for leaving by 5.4 per cent of the respondents. Poor living and community resources, staff-administration conflict, and overload of children in the classroom each were indicated by between four and five per cent of the respondents. Each of the other distinct categories received responses from fewer than four per cent of the respondents.

Emigrants. Emigrants expressed most dissatisfaction with living and community resources, lack of opportunity for advancement, inadequate salaries, unsatisfactory subject area assignment, and staff-administration conflict. The rates of dissatisfaction with the above ranged from 9.8 per cent to 5.3 per cent. Each other category of dissatisfaction received responses from fewer than five per cent of

TABLE XI

RATE OF DISSATISFACTION WITH TEACHING EXPRESSED BY EMIGRANTS,
HOUSEKEEPERS, AND TEACHERS LEAVING FOR OTHER VOCATIONS³⁹
(EXPRESSED AS PER CENT OF RESPONDENTS)

Dissatisfaction	Category of Dropout			
	Emigrants	Housekeepers	Other Vocations	Total
None	12.5	15.1	6.3	13.4
Overload of children	4.2	3.1	11.0	4.2
Too many grades	3.4	1.7	3.1	2.4
Unsatisfactory grade level	4.2	1.2	1.6	2.3
Unsatisfactory subject area	5.3	1.9	4.7	3.4
Inadequate salary	7.2	2.4	17.2	5.4
Unsatisfactory living and community resources	9.8	1.0	7.8	4.7
No opportunity for advancement	7.6	0.5	4.7	3.4
Staff-administration conflict	5.3	3.4	9.4	4.6
Other	6.4	1.7	15.6	4.6
No. of Possible Responses	345	537	82	964

³⁹ Compiled from Tables D.6 to D.9 of Appendix D.

the respondents, and 12.5 per cent expressed complete satisfaction with positions.

Housekeepers. Over fifteen per cent of the housekeepers expressed complete satisfaction with their positions, and all categories of dissatisfaction received responses from fewer than three and one-half per cent of the respondents.

Other vocations. Nearly one-fifth of the 82 teachers leaving for other vocations indicated inadequate salary as one reason for dissatisfaction. Overload of children was cited by 11.0 per cent, staff-administration conflict by 9.4 per cent and poor living and community resources by 7.8 per cent. Other items received responses from fewer than five per cent of the teachers. Only 6.3 per cent indicated satisfaction with teaching.

Lapse in Service for Housekeepers

Most teachers returning to housekeeping expected lapses in service for more than two years as indicated by Table XII. Only approximately ten per cent had decided to abandon teaching. Nearly half were undecided either about returning to service in the future or the time at which resumption might occur.

Nearly one-quarter of the teachers expected to resume employment with the same employer in the same location as indicated in Table D.11 of Appendix D.

TABLE XII

EXPECTED DURATION OF LAPSES IN SERVICE
 FOR DROPOUTS BECOMING HOUSEKEEPERS⁴⁰
 (EXPRESSED AS PER CENT OF
 RESPONDENTS)

Expected Duration of Lapse	Number	Per Cent
One Year	31	5.5
Two Years	5	1.2
More Than Two Years	148	27.6
Permanent	57	10.6
Undecided	244	45.5
Not Reported	52	9.6
Total	537	100.0

⁴⁰ Compiled from Table D.10, Appendix D.

V. DROPOUT RESULTING FROM RETIREMENT, SUPERANNUATION
AND FULL-TIME STUDY

Retirement and Superannuation

The rate of dropout due to retirement and superannuation was reported in Table VIII (p. 47) as 0.81 per cent of the teaching force. The 120 teacher loss could be considered relatively insignificant when compared to the total force of approximately 15,000. The dropout included teachers retiring due to illness, where some recovery might be anticipated. It was also possible that superannuated teachers might return to service or undertake part-time and substitute teaching positions, thereby contributing somewhat to the teacher supply.

Full-Time Study

Teachers returning to full-time study accounted for 21.84 per cent of the dropouts or 2.42 per cent of the teaching force. These teachers were not lost to the profession and it could be anticipated that most would return to service with better qualifications. For individual school systems, such teachers did contribute to the number which must be recruited each year.

Lapse. Over one-third of the teachers returning to full-time study expected to return to service in the following year as reported in Table D.12 of Appendix D. Another one-third were undecided about the length of lapse, while

approximately two-fifths anticipated lapses of two or more years.

VI. CHARACTERISTICS AND ENVIRONMENTS OF DROPOUTS

Years of Teacher Education

The frequency distribution of dropouts according to years of teacher education for each category of dropout, for the total dropout population, and the reported distribution for the teaching force are given in Table D.14 of Appendix D. Proportional distributions for those teachers for whom data were reported are summarized in Table XIII. Over one-third of the dropout population reported one year of teacher education. Approximately one-quarter reported two years, and approximately one-fifth reported four years. The remaining one-fifth reported three, five or six years.

The distribution of years of teacher education of dropouts was compared to that of the provincial teaching force. A contingency table was prepared (Table E.1, Appendix E).

H_0 1: The frequency distribution according to years of teacher education for the dropout population was not significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

The calculated value of chi square is reported in

TABLE XIII

PROPORTIONAL DISTRIBUTION OF YEARS OF TEACHER EDUCATION
OF DROPOUTS ACCORDING TO DESTINATIONS
(EXPRESSED AS PER CENT OF EACH
CATEGORY FOR WHICH DATA
WAS OBTAINED)

Destination	Number of Years of Teacher Education						Total
	1	2	3	4	5	6	
Full-Time Study	25.6	38.7	7.9	20.9	3.2	3.8	100.1
Housekeeping	51.1	24.7	8.3	11.8	3.4	0.6	99.9
Other Vocations	37.8	22.6	7.6	24.5	1.9	5.7	100.1
Retired, etc.	67.0	12.5	1.1	11.4	5.7	2.3	100.0
Emigrating	26.9	21.2	11.7	21.2	11.2	7.8	100.0
Other Destinations	24.3	22.8	5.7	32.1	7.9	7.2	100.0
Total Dropouts	37.5	25.9	8.0	18.8	5.7	4.0	99.9
Provincial Force 1964-65*	19.5	24.8	15.3	14.5	15.8	10.0	99.9

* These proportions were extrapolated from those reported by Sillito, *op. cit.*, Table 4.2, p. 15.

Table E.2. H_0 1 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{\text{obs.}} = 353.13$). The observed chi square also exceeded the value critical at the .001 level.

It was inferred that the frequency distribution according to years of teacher education of dropouts was significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

The contributions made to the total value of chi square in Table E.2 by each cell of years of teacher education of dropouts were compared to the critical value of chi square with one degree of freedom. There was no significant difference between the observed number of dropouts reporting two years of teacher education and the expected number according to the distribution for the provincial teaching force. In each other cell of years of teacher education, the observed numbers were significantly different from those expected. The observed number of dropouts reporting one year of teacher education was much higher than expected, with four years of teacher education slightly higher than expected; the number of dropouts reporting three, five, and six years of teacher education each were much lower than expected.

Comparisons of Years of Teacher Education of Dropouts
According to Reported Destination

The frequency distributions of dropouts according to

years of teacher education for each category of destination were compared to the distributions expected if the dropouts were representative of the provincial teaching force. Null hypotheses were assumed and values of chi square calculated. A summary of values is reported in Table E.2. For each category of dropout, the null hypothesis was rejected. The observed values of chi square also exceeded the values critical at the .001 level. The distributions of dropouts according to years of teacher education for each category of destination were significantly different from those expected if the dropouts were representative of the provincial teaching force.

For each category of destination in Table E.2, the contribution by each cell to the value of chi square was examined. The results are summarized in Table XIV. The following hypotheses were accepted.

Dropouts returning to full-time study. The number of dropouts returning to full-time study was significantly different from the number expected if these dropouts were representative of the provincial teaching force for each of the six cells of years of teacher education. The observed numbers with one and four years of teacher education were higher, with two years much higher than the expected numbers; the observed numbers with three and six years were lower, with five years much lower than the expected numbers.

Dropouts undertaking housekeeping. The number of

TABLE XIV

SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN OBSERVED AND EXPECTED FREQUENCIES OF YEARS OF TEACHER EDUCATION FOR DROPOUTS ACCORDING TO DESTINATION

Dropout Destination	Years of Teacher Education					
	1	2	3	4	5	6
Full-Time Study	+*	+++	--	++	---	--
Housekeeping	+++		---		---	---
Other Vocations	++				--	
Retired, etc.	+++	-	---		--	-
Emigrants	+			++		
Other Destinations			--	+++	-	
Total Dropout Population	+++		---	+++	---	---

Note: + indicates that the observed dropout frequency is higher than the expected frequency; - indicates that it is lower. The statistical level exceeded is also coded:

.05 level + or -
.01 level ++ or --
.001 level +++ or ---

* This cell should be read: the number of dropouts with one year of teacher education returning to full-time study is significantly different from the expected proportional number from the provincial force at the .05 level; the observed number was higher than that expected.

dropouts undertaking housekeeping was significantly different from the number expected if these dropouts were representative of the provincial teaching force for the cells of one, three, five, and six years of teacher education. The observed number with one year of teacher education was much higher than the expected number; the observed numbers with three, five, and six years were much lower than those expected.

Dropouts entering other vocations. The number of dropouts entering other vocations was significantly different from the number expected if these dropouts were representative of the provincial teaching force for the cells of one and five years of teacher education. The observed number with one year of teacher education was higher than the expected number; the observed number with five years of teacher education was lower than expected.

Dropouts retiring or being superannuated. The number of dropouts retiring or being superannuated was significantly different from the number expected if these dropouts were representative of the provincial teaching force in each cell of teacher education except four years. The observed number with one year of teacher education was much higher than the expected number; the numbers with two, five, and six years lower than expected, and the number with three years much lower than expected.

Dropouts emigrating from the province. The number of

dropouts emigrating from the province was significantly different from the number expected if these dropouts were representative of the provincial teaching force in only the cells of one and four years of teacher education. The observed number in each of these cells was higher than the expected number.

Dropouts leaving for other destinations. The number of dropouts leaving for other destinations was significantly different from the number expected if these dropouts were representative of the provincial teaching force in the cells of three, four, and five years of teacher education. The observed numbers of dropouts with three and five years were lower than the expected numbers. The observed number with four years was much higher than expected.

Years of Teaching Experience

The frequency distribution of dropouts according to years of previous teaching experience, together with the reported distribution for the provincial teaching force are reported in Table D.15 of Appendix D. Expected frequencies were calculated in proportion to those of the provincial teaching force and reported in a contingency table, Table E.3 of Appendix E.

H_0 2: The frequency distribution according to years of previous teaching experience for the dropout population was not significantly different from that which would be expected if the dropouts were representative of the

provincial teaching force.

The value of chi square was calculated and reported in Table E.3. H_0 2 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{\text{obs.}} = 141.01$). The observed value of chi square also exceeded the value critical at the .001 level.

It was inferred that the frequency distribution according to years of previous teaching experience of the dropout population was significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

The contributions made to the total value of chi square by each cell were compared to the critical values of chi square with one degree of freedom. There was no significant difference between the observed numbers and expected numbers for the cells of 0 - 1 years of previous experience, and 10 - 14 years of previous experience. The observed numbers in the cells of 2, 3 - 5, 6 - 9, and 15+ years of previous teaching experience were significantly different from the expected numbers. The observed number in the cell of 6 - 9 years was higher than the expected number. The observed numbers in the cells of 2 and 3 - 5 years were much higher than the expected numbers. The observed number in the cell of 15+ years was much lower than expected.

Source of Original Certificate of Emigrants

The number of emigrants reporting original teacher certification from outside the province was 164, or 47.5 per

cent of the emigrants. This proportion was approximately double the 24.0 per cent reported by Sillito for the Alberta teaching force.

Sex and Female Marital Status

The frequency distribution of dropouts according to sex and female marital status, together with the reported distribution for the provincial teaching force are reported in Table D.16 of Appendix D. The categories used were: male, single female, married female, and other female (widowed, divorced, separated, or members of religious orders). Expected frequencies were calculated in proportion to those of the provincial teaching force and reported in a contingency table, Table E.4 of Appendix E.

H_o 3: The frequency distribution of dropouts according to sex and female marital status was not significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

H_o 3 was rejected ($\chi^2_{.05} = 7.82$, $\chi^2_{\text{obs.}} = 59.59$).

The observed chi square also exceeded the value critical at the .001 level.

It was inferred that the distribution of dropouts by sex and female marital status was significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

The contribution made to the total value of chi square by each cell of sex and female marital status was

compared to the critical value of chi square with one degree of freedom. The observed numbers in each of the four cells were significantly different from the expected numbers. The observed number of male dropouts was much lower than expected; the observed number of other females (widowed, divorced, separated, or members of religious orders) was lower as well. The observed numbers of single female and of married females were much higher than the expected numbers.

The frequency distributions of dropouts by sex and female marital status for the categories returning to full-time study and emigrating were each compared statistically to the distributions expected if these categories dropouts were representative of the provincial teaching force. The summary of values of chi square is provided in Table E.5 of Appendix E.

Full-time study. The frequency distribution of dropouts returning to full-time study categorized according to sex and female marital status was significantly different from that which would be expected if these dropouts were representative of the provincial teaching force. Examination of the contribution made by each cell indicated that the observed numbers in each cell were significantly different from the expected numbers. The observed numbers of male and single female dropouts returning to full-time study were much higher than the expected numbers; the observed numbers of married and other females were much lower than the

expected numbers.

Emigrating. The frequency distribution of dropouts emigrating from the province categorized according to sex and female marital status was significantly different from that which would be expected if these dropouts were representative of the provincial teaching force. Examination of the contribution made by each cell indicated that the observed numbers in the cells of single female and married female were significantly different from the expected numbers. The observed number of single female dropouts was much higher than the expected number; the observed number of married females was much lower than the expected number.

Age

The frequency distribution of dropouts according to age for each category of dropout, for the total dropout population, and the reported distribution for the provincial teaching force are given in Table D.17 of Appendix D. For dropouts for whom data were reported, over one-half of the dropouts returning to full-time study were under twenty-six years of age, and approximately seven-eighths were under thirty-six. For dropouts becoming housekeepers, approximately one-third were under twenty-six and another one-third were in the 26-35 age group. Nearly one-half of the dropouts entering other vocations were under twenty-six. More than one-third of the dropouts emigrating from the province were under twenty-six and another one-third were in the

26-35 age group. Nearly two-thirds of the teachers leaving for other destinations were under thirty-six years of age.

The distribution of dropouts according to age was compared to that of the provincial teaching force. Expected frequencies were calculated in proportion to the distribution of the provincial teaching force and reported in Table E.6 of Appendix E with calculated values of chi square.

H_0 4: The frequency distribution of dropouts according to age was not significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

H_0 4 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{\text{obs.}} = 391.13$).

The observed chi square also exceeded the value critical at the .001 level.

It was inferred that the distribution of ages of dropouts was significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

The contributions made to the total value of chi square by each cell were compared to the critical values of chi square with one degree of freedom. The number of dropouts in each cell of age was significantly different from that expected if the dropouts were representative of the provincial teaching force. The number of dropouts under 26, in the 26-35 cell, and over 66 years of age were each much higher than the expected numbers; the numbers in the 36-45,

46-55, and 56-65 age cells were each much lower than the expected numbers.

Size of School

The size of school (number of classrooms) in which dropouts taught is reported in Table D.18 of Appendix D along with statistics on the number of provincial schools in each range. No statistical comparisons could be made because no correspondence existed between the two sets of statistics.

For the dropouts for whom data were reported, approximately forty-four per cent taught in schools of 16 or more classrooms. An additional thirty-three per cent taught in schools of 10-15 classrooms, approximately twelve per cent taught in schools of 7-9 classrooms, and the remaining eleven per cent taught in schools of 1-6 classrooms.

Grade Level

The grade levels at which the dropouts taught are reported in Table D.19 of Appendix D. For teachers for whom data were available, slightly more dropouts had taught in elementary in comparison to secondary grades. No corresponding descriptions of the distribution of the teaching force were available so statistical comparisons were not made.

Type of Position

Dropouts were categorized according to three types of

teaching position: principal, vice-principal, and regular teacher. The frequency distributions of dropouts and the provincial proportions are reported in Table D.20 of Appendix D.

Over ten per cent of the dropouts for whom data were available held administrative positions, and the remainder were regular classroom teachers. A statistical comparison with the distribution for the provincial teaching force was made.

H_0 5: The frequency distribution of dropouts according to type of teaching position held is not significantly different from that which would be expected if the dropouts were representative of the provincial teaching force.

Expected frequencies were calculated and the value of chi square reported in a contingency table, Table E.7 of Appendix E. H_0 5 was rejected, ($\chi^2_{.05} = 5.99$, $\chi^2_{\text{obs.}} = 7.58$). It was inferred that the distribution of dropouts by type of position held was significantly different from that which would be expected if dropouts were representative of the provincial teaching force. Inspection of the contribution to the total value of chi square by each cell indicated that only the number of vice-principals who dropped out was significantly different from the expected number. The number of vice-principals was lower than the expected number.

Occupation of Dropouts in 1963-64

The 1963-64 occupation of the dropouts was tabulated

and reported in Table D.21 of Appendix D. Over twenty per cent of the dropouts returning to further studies had been at university in 1963-64 and were interrupting their studies with one year of teaching service. Approximately seventeen per cent of the women returning to housekeeping had been housekeeping in 1963-64. Over fifteen per cent of the teachers emigrating from the province had only entered the province in September 1964. For a statistical comparison, expected numbers were calculated, and the value of chi square calculated and reported in Table E.8 of Appendix E.

H_o 6: The frequency distribution of previous service of dropouts is not significantly different from that which would be expected if dropouts were representative of the provincial teaching force.

H_o 6 was rejected ($\chi^2_{.05} = 9.49$, $\chi^2_{\text{obs.}} = 203.87$). It was inferred that the distribution of dropouts according to previous service was significantly different from that expected if the dropouts were representative of the provincial teaching force. The observed value of chi square exceeded the value critical at the .001 level.

The contributions made to the total value of chi square by each cell were compared to the critical value of chi square with one degree of freedom. The number of dropouts in each cell was significantly different from the expected number. The number of dropouts teaching in the province in 1963-64 was much lower than the expected number.

The numbers teaching outside the province, at university or school study, housekeeping, and in other vocations were each much higher than the expected numbers.

VII. SYSTEM DIFFERENCES

For the purposes of this section, a number of comparisons were made between frequency distributions of various properties of dropouts categorized according to the type of system and the corresponding frequency distributions of properties of the dropout population or of the teaching force. School systems were defined as the large city (LC) systems employing more than 2,000 teachers each (for 1965, only Calgary and Edmonton Public School Districts fell into this category); counties and divisions (CD); and other independent districts (OD). For the 1964-65 school year, no district in the OD category employed more than 1000 teachers.

Rate of Resignation

The number of teachers who resigned from each type of system (Table VI, p. 44) was compared to the number who resigned in the province. Large city systems employed 33.35 per cent of the teaching force and experienced 18.46 per cent of the resignations. Counties and divisions employed 41.20 per cent of the teaching force and experienced 52.42 per cent of the resignations. Other districts employed 25.45 per cent of the teaching force and experienced 29.12

per cent of the resignations.

H_o 7: The frequencies of resignations from each type of system were not significantly different from those which would be expected if the resignations were representative of the provincial resignation frequency.

Expected frequencies and the values of chi square are reported in Table E.9 of Appendix E.

H_o 7 was rejected ($\chi^2_{.05} = 5.99$, $\chi^2_{\text{obs.}} = 259.65$).

It was inferred that the frequencies of resignation from each type of system were significantly different from those which would be expected if resignations from each type of system were representative of the province. The observed value of chi square also exceeded the value critical at the .001 level.

The contributions made to the total value of chi square by each cell were compared with the critical value of chi square with one degree of freedom. The frequency of resignation from each of the three types of systems was significantly different from the provincial frequency. The frequency from large city systems was much lower than expected; the frequency from other independent districts was each higher than expected; the frequency from county and division systems was much higher than expected.

Frequency of Dropout

The frequency of dropout for each type of system was compared to the provincial dropout frequency (Table VII,

p. 46). Large city systems experienced a dropout rate of 8.0 per cent, counties and divisions experienced a rate of 12.7 per cent, and other independent districts experienced a rate of 13.3 per cent of the respective teaching force employed in 1964-65.

H_o 8: The frequencies of dropout from each type of system were not significantly different from those which would be expected if the resignations were representative of the provincial dropout frequency.

Expected frequencies and the values of chi square are reported in Table E.10 of Appendix E.

H_o 8 was rejected ($\chi^2_{.05} = 5.99$, $\chi^2_{\text{obs.}} = 259.65$). It was inferred that the frequencies of dropout from each type of system were significantly different from those which would be expected if dropout frequencies from each type of system were representative of the provincial dropout frequency. The observed value of chi square also exceeded the value critical at the .001 level.

The contributions made to the total value of chi square by each cell were compared to the critical value of chi square for one degree of freedom. The dropout frequency from large city systems was much lower than the expected frequency; the dropout frequencies from counties and divisions and other independent districts were much higher than the expected frequency.

Destinations of Dropouts

The frequency distribution of dropouts by destination for each type of system was reported in Table D.1 of Appendix D. The frequencies for each type of system were compared to the provincial dropout frequencies. Expected frequencies are reported in Table E.11 of Appendix E. A summary of the values of chi square appears in Table E.12 of Appendix E.

H_o 9: The frequency distribution of dropouts by destination for each type of system is not significantly different from that which would be expected if each type of system were representative of the province.

Large city systems. H_o 9 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{\text{obs.}} = 23.54$). It was inferred that the distribution of dropouts by destination from large city systems was significantly different from the distribution of destinations of the provincial dropout population. The contribution to the total value of chi square by each cell was compared to the critical value of chi square with one degree of freedom. The observed frequencies returning to full-time study and those leaving for "other" destinations were significantly different from the expected frequencies. The number returning to full-time study was lower than the expected number; the number leaving for "other" destinations was much higher than the expected number. Differences were not significant for the other four destinations.

County and division systems. H_o 9 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{obs.} = 22.45$). It was inferred that the distribution of dropouts by destination from county and division systems was significantly different from the distribution of destinations of the provincial dropout population. The observed frequencies of dropouts returning to full-time study and emigrating were significantly different from the expected frequencies. The number returning to full-time study was much higher than the expected number; the number emigrating from the province was much lower than the expected number.

Other districts. H_o 9 was rejected ($\chi^2_{.05} = 11.07$, $\chi^2_{obs.} = 14.45$). It was inferred that the distribution of dropouts by destination from other districts was significantly different from the distribution of the destinations of the provincial dropout population. The observed frequencies of dropouts emigrating from the province was significantly different. The observed number emigrating was higher than the expected number.

Losses and Sources of Teachers

Teacher losses and recruitment for large city systems and for counties and divisions were compiled and examined.

Large city systems. Large city systems recruited 1,315 teachers for a net increase of 739 in 1965 as reported in Table XV. The primary net source of teachers for large city systems was recruitment from recent graduates from the

TABLE XV

DESTINATION OF TEACHER LOSSES IN JUNE 1965 AND REPORTED SOURCES IN SEPTEMBER 1965 FOR LARGE CITY SYSTEMS

Category	Loss ¹	Source ²	Net
Teaching Staff, September 1964			4,959
Teaching Elsewhere in Alberta	107	281	+174
Full-Time Study	56	729	+672
Housekeeping	117	97	- 20
Other Vocations	16	20	+ 4
Retired, etc.	19	-	- 19
Teaching Outside Alberta	84	170	+ 86
Other	70	18	- 52
Total, September 1965	576	1,315	5,812

¹Extrapolated from Table D.1, Appendix D.

²Interpolated from Teacher Recruitment Report,
Department of Education (Mimeo., October 1965).

university. Secondary net sources were from teachers mobile within the province and from immigrating teachers.

The sources of teachers recruited into the provincial teaching force by large city systems was statistically compared with provincial recruitment in Table E.13 of Appendix E.

H_0 10: The number of teachers recruited from various sources by large city systems was not significantly different from that expected if large city recruitment were representative of provincial recruitment.

H_0 10 was rejected ($\chi^2_{.05} = 9.49$, $\chi^2_{\text{obs.}} = 109.64$). It was inferred that the frequency of recruitment of teachers by large city systems from various sources was significantly different from that expected if large city recruitment was representative of provincial recruitment.

The contributions made to the total value of chi square by each cell were compared to the critical value of chi square with one degree of freedom. The numbers of teachers recruited by large city systems from teachers at full-time study, at housekeeping, teaching outside the province, and at "other" vocations were each significantly different from the numbers expected if large city system recruitment were representative of provincial recruitment. The observed number of recruits from full-time study was much larger than the expected number. The observed number recruited from immigrants and from "other" sources was

smaller than the expected number; the observed number recruited from housekeeping was much smaller than the expected number.

Counties and divisions. Counties and divisions recruited 1,713 teachers for a net gain of 381 in September 1965 as indicated in Table XVI. Over half of this net gain was accounted for exclusively by teachers immigrating into the counties and divisions from outside the province. Other net sources were from recruitment from the university graduates and from housekeepers. Movement within the province resulted in a net loss of 35 teachers in 1965.

The sources of teachers for counties and divisions were compared with provincial recruitment in Table E.14 of Appendix E.

H_o 11: The number of teachers recruited from various sources by counties and divisions was not significantly different from that expected if county and division recruitment were representative of provincial recruitment.

H_o 11 was rejected ($\chi^2_{.05} = 9.49$, $\chi^2_{\text{obs.}} = 109.64$). It was inferred that the frequency of recruitment by counties and divisions from various sources was significantly different from that expected if county and division recruitment were representative of provincial recruitment.

The contributions made to the total value of chi square by each cell were compared to the critical value of chi square with one degree of freedom. The numbers of

TABLE XVI

DESTINATION OF TEACHER LOSSES IN JUNE 1965 AND REPORTED SOURCES IN SEPTEMBER 1965 FOR COUNTIES AND DIVISIONS

Category	Loss ¹	Source ²	Net
Teaching Staff, September 1964			6,127
Teaching Elsewhere in Alberta	551	516	- 35
Full-time Study	204	485	+281
Housekeeping	265	315	+ 50
Other Vocations	38	34	- 4
Retired, etc.	64	-	- 64
Teaching Outside Alberta	124	316	+192
Other	87	47	- 40
Total, September 1965	1,332	1,713	6,507

¹Extrapolated from Table D.1, Appendix D.

²From Teacher Recruitment Report, Department of Education (Mimeo., October 1965).

teachers recruited by counties and divisions from teachers at full-time study, at housekeeping, teaching outside the province, and at "other" vocations were each significantly different from the numbers expected if county and division recruitment were representative of provincial recruitment. The number of teachers recruited from full-time study was much lower than the expected number; the number recruited from "other" sources was higher; the numbers recruited from housekeeping and from immigrants were each much higher than the expected numbers.

Other districts. Information on the recruitment of teachers by other independent districts was not available so comparisons were not made.

Future Service by Dropouts Entering Full-Time Study

The place of expected re-employment of dropouts returning to full-time study was reported in Table D.13 of Appendix D for each type of school system. The distribution of expectations for each type of system was compared to the provincial expectation in a contingency table, Table E.15 of Appendix E. Values of chi square were calculated for each type of system and reported in Table E.16 of Appendix E.

H_0 12: The place of expected later re-employment of dropouts entering full-time study for each type of system is not significantly different from that which would be expected if each type of system were representative of provincial expectations.

H_0 12 was rejected only for large city systems ($\chi^2_{.05} = 5.99$, $\chi^2_{\text{obs.}} = 12.48$). It was inferred that the expected place of re-employment of dropouts entering full-time study from large city systems was significantly different from that expected if large city systems were representative of the province expectations.

The contributions made to the total value of chi square for large city systems were examined. The number of dropouts expecting to be employed by new employers was significantly different from the expected number. The number expecting to be re-employed by new employers was smaller than the expected number.

Values of chi square did not justify rejection of the null hypotheses for the other two types of systems.

VIII. SUMMARY OF FINDINGS

Rate of Resignation and Teacher Loss

For 1965, the rate of resignation was 17.1 per cent (slightly less than previous average rates of 20 per cent) and the dropout rate was 11.1 per cent (compared to recent rates of 11.3 to 11.6 per cent).

The resignation rate for large city systems (9.45 per cent) were less than half the rates for counties and divisions (21.74 per cent). Resignation rates in some counties and divisions ranged as high as 40 per cent.

Destinations of Dropouts

Approximately one-third of the dropouts were undertaking housekeeping, one-fifth were returning to full-time study, one-fifth were emigrating, and less than one-tenth entering retirement or superannuation.

Major net gains in the number of teachers entering service were made from students at full-time study and from immigrants from other provinces and countries. Net losses were suffered due to retirement, superannuation, and "other" destinations. The movements to and from housekeeping and other vocations were closely balanced. After replacement and annual growth had been satisfied, a theoretical surplus of 554 teachers should have been available to relieve the shortage in 1965.

Reasons for Dropout and Dissatisfaction

Twenty per cent of the emigrants were married women moving because their husbands had been transferred to new locations. Twelve per cent were dissatisfied, chiefly with living conditions, lack of advancement, salaries, assignments, and administrative conflict.

Married women becoming housekeepers indicated this choice of priority in approximately twenty-seven per cent of the cases. Husbands were being transferred in ten per cent of the cases. No major areas of dissatisfaction were identified.

Most married women expected considerable lapses in

service and although many expressed indecision over return to service in the future, only ten per cent had decided to leave permanently. Most women expected to resume service later with the same employer they had left.

Nearly one-third of the dropouts leaving for other vocations were dissatisfied, chiefly with salary being received, teaching assignments, administrative conflict, and living conditions.

Approximately one-third of the dropouts returning to study expected a lapse in service of only one year. For teachers from counties and divisions, the proportion approached one-half. Approximately one-fifth of the teachers expected studies two or more years in duration. Most city teachers expected to resume employment with their previous employer while teachers from counties and divisions anticipated new positions elsewhere.

Dropout Characteristics and Environment

In general, the proportion of dropouts with one year of teacher education was significantly greater than the proportion in the teaching force. The proportion with two to five years of previous teaching experience was also significantly greater, and the proportion with more than fifteen years experience significantly lower. Almost half of the emigrants had received their original teacher certification outside the province. The proportions of single and married female dropouts were significantly higher; males and other

females (widowed, divorced, separated, or members of religious orders) significantly lower than provincial proportions. Most dropouts were under thirty-six years of age, and one-third were under twenty-six.

Over twenty per cent of the teachers returning to further studies had been at university in 1963-64. Approximately seventeen per cent of the dropouts returning to housekeeping had been housekeeping in 1963-64. Over fifteen per cent of the emigrants had taught in the province for only one year.

Urban-Rural Differences

In comparisons of properties of dropout populations of each of the types of school systems with properties of the provincial dropout population, the following significant differences were identified.

Large city systems had lower resignation and dropout rates. They had lower numbers of dropouts returning to full-time study and higher numbers leaving for "other" destinations. Major net increases in teaching staff were recruited from teachers at full-time study, teaching elsewhere in Alberta, and from immigrants. Net losses were experienced with housekeepers, "others" and attrition due to retirement and superannuation. Most teachers leaving for full-time study expected to be re-employed by the same employer.

Counties and divisions had higher resignation and dropout rates. They had higher numbers of dropouts

returning to full-time study and lower numbers leaving to teach outside the province. Major net increases in teaching staff were recruited from teachers at full-time study, immigrants, and housekeepers. Net losses were experienced with teachers leaving to teach elsewhere in Alberta, attrition due to retirement and superannuation, and losses from "other" categories. Many teachers leaving for full-time study expected to be re-employed by new employers in new locations.

Other independent districts had higher resignation and dropout rates. They had higher numbers leaving to teach outside the province.

Conclusions, implications, and recommendations are presented in Chapter V.

CHAPTER V

CONCLUSIONS, OBSERVATIONS, AND RECOMMENDATIONS

I. SUMMARY

The purpose of this study was to collect and interpret information on the relationship of the dropout of teachers from active service to the shortage of teachers in the province.

The total population of teachers who resigned from active service in 1965 in Alberta was surveyed.

Information from the Teacher's Report and the questionnaire was collected for 1,984 of the 2,541 teachers who resigned in May or June of 1965. An estimated 1,648 teachers left active service and were the primary concern of this study. The study showed that although considerable recruitment of teachers is necessary to replace the eleven per cent of the teaching force which were reported as dropouts, the rate of permanent attrition was four per cent of the teaching force. Four and one-half per cent were experiencing lapses in service in Alberta while the remaining two and one-half per cent were part of the inter-provincial mobility.

The statistical comparisons show significant system differences in the rates of resignation, destination of teachers, dissatisfactions expressed, and intentions for further service. Significant differences between the

characteristics of the dropout population and the total teacher population were observed.

II. CONCLUSIONS AND IMPLICATIONS

It appears that certain conclusions may be made regarding the shortage of teachers and the effects of teachers who leave active service.

The Teacher Shortage

This study indicates that a numerical shortage of teachers was not being experienced provincially. In September 1964, the Annual Report indicated that 12,446 classrooms were in operation.⁴¹ For the same school term, superintendents in the province reported the employment of 15,042 teachers by the end of September 1964, the Statistical Branch of the Department of Education reported 16,007 teachers employed by the end of June 1965, and the Registrar of the Department of Education reported 16,139 teachers as having served for one or more days in a school in Alberta. Employers thus found it possible to recruit 1,093 teachers for substitute, temporary, or permanent service after the 1964-65 school term began. There were resident in the Province of Alberta a sufficient number of certificated teachers to adequately staff all the classrooms. In

⁴¹ Department of Education, op. cit., 1964, p. 176.

addition, computations made from statistics on teacher loss and recruitment indicate that 2,858 teachers were recruited in September 1965, 554 more than were necessary to accommodate growth and replace dropouts in that year. This conclusion does not preclude that individual schools, school systems, geographic areas or school subject areas do not experience or will not continue to experience a shortage of teachers. Neither does the conclusion exclude the possible necessity of employing marginally-qualified teachers for service in classrooms. The problems of teacher supply and retention for individual school jurisdictions seem to be considerably different from those of provincial supply and retention.

Systems experiencing recurring resignation rates of thirty or forty per cent face severe recruitment problems. This study provides no assurance that increased numbers of teachers will alleviate the shortage in such areas. The fact that such school systems have managed to recruit sufficient teachers each year to replace their forty per cent turnover can be interpreted as an indication of the absence of a shortage of teachers, and suggests that such areas may profit from a review of their retention problems rather than expect resolution of their problems by a greater supply of teachers.

Teacher Dropouts

The completion of this study indicates that dropout

of teachers must be re-defined. Teachers leaving for further studies, returning to housekeeping, and leaving for other vocations have previously been included in the dropout category. This study indicates that most of the teachers returning to study experience a lapse of one or two years of service and can be expected to return as better-qualified teachers. A considerable portion of women returning to housekeeping anticipate return to service after a lapse of more than two years. Recruitment of teachers from other vocations matched dropout so that no net loss accrued. Even teachers leaving to teach outside the province were not lost to teaching, but were part of the general teacher mobility in Canada from which Alberta has benefitted appreciably.

This study suggests strongly that the definition of dropouts be restricted to the one per cent of the force retiring or being superannuated, 1.8 per cent who permanently leave for housekeeping, and 1.5 per cent who leave for "other" destinations. This restriction would place the dropout rate closer to four per cent of the teaching staff rather than the eleven per cent currently reported.

An appraisal of the reasons teachers give for leaving active service indicates that there may not be much that can be done to retain most of these teachers, since dissatisfactions were not a major factor.

A significantly high rate of return to full-time study from counties and divisions was identified. This may suggest

that city teachers find it more practical to improve their status through evening credit, professional development and summer session courses, all of which are less accessible to the rural teacher. In addition, it would seem that rural teachers use their year of additional study as a vehicle to attaining a position with new employers. This conclusion is supported by the significantly high proportion of graduates recruited by the cities. The investigator observes that the present procedure of operating regular sessions of the universities for a seven-month period prevents the utilization of teachers undertaking full-time study for an additional five months of the year. More effective utilization of the teachers might be made if the time of university sessions were closely coordinated with school terms or semesters to eliminate loss of teaching service time.

Significantly high losses of married women teachers returning to housekeeping were identified in the study. This fact when considered with the significantly lower recruitment from this source by city systems leads to the conclusion that a substantial pool of certificated married women teachers is accumulating in urban areas. No evidence was collected concerning employment policies of urban systems. Neither is information available to indicate whether such systems selectively exclude resident married women who are willing to teach. It is likely that city systems rely heavily on this source for relieving, substitute and

temporary teachers for in-term turnover. Neither does there seem to be any reason to expect that greater utilization of married women teachers by city systems would make more teachers available for rural areas. It may be that a decrease in pupil-teacher ratio or the expansion of educational services in cities would be the direct result.

This study documents the dependence upon married women teachers for recruitment by counties and divisions. Since this category of teacher is also highly susceptible to resignation, it is likely that rural systems can anticipate continued high turnover of teachers. The large portion of married women who had been housekeeping in 1963-64 also indicates that many have resumed service to fill a gap, and can be expected to terminate services at their earliest convenience.

This study documents that many married women who leave teaching expect to return after a lapse of several years. No evidence has been collected to determine the extent to which such teachers have opportunities to maintain their professional teaching competence or to keep abreast of professional developments. Should considerable curriculum and educational changes continue to occur, such teachers may become professionally inadequate in the future and permanently lost to teaching service.

This study strongly supports the conclusion that large scale movement from teaching to other full-time

vocations because of dissatisfaction with teaching does not exist. The number of teachers indicating this category was insignificant in comparison to the total teaching population, and almost as many teachers were recruited from such sources as were lost.

Teacher mobility within Canada has been indicated by the continued net increase of staff that Alberta enjoys. The high percentage of single females emigrating from the province may reflect a desire for adventure and travel. A substantial portion of the married women emigrating were forced to do so to accompany their husbands who had been relocated in employment. Other emigrants expressed dissatisfaction with living and community resources, lack of opportunity for advancement, inadequate salaries, unsatisfactory teaching assignments and staff-administration conflicts. These facts suggest that a pattern of movement may exist whereby immigrants are attracted to rural areas, become dissatisfied with various deficiencies of rural school systems, and either emigrate from the province or become attracted to larger school centres.

This study suggests that possible action to increase retention of potential dropouts could best be taken by employers in individual school systems where dropout and turnover are problems. Any action that may be taken would likely be restricted to the three per cent of the teaching force that is neither retiring nor enduring an unavoidable

lapse in teaching service. The problem of retaining well-qualified staff can be expected to continue to challenge employers.

Teacher Supply

A review of teacher loss and recruitment of the past four years is provided in Table XVII. Examination of the table indicates that actual growth of the teacher force varied widely from the 700 projected by Ayers.⁴² The inadequacy of accounting procedures is emphasized by the difference between the theoretical gain of 1,210 teachers and reported gain of 569 in 1965, and again by the theoretical gain of 955 and reported gain of 1,328 in 1966. Changes in the number of teachers over the two-year period from 1964 to 1966 ranged between a reported increase of 1,897 and a theoretical increase of 2,165 while the number of classrooms increased by only 1,155.⁴³ During the same two-year period, the reported shortage of teachers dropped from 263 to 238, the number of teachers considered to be improperly utilized according to their training rose from 673 to 903, and the number of teachers who assignment was considered

⁴² Ayers, op. cit., p. 86.

⁴³ Annual Report, 1966, p. 198.

TABLE XVII

LOSSES¹ AND RECRUITMENT² OF TEACHERS, 1962-63 TO 1965-66

Year	Staff ³	Outside of Province	Housekeeping and Marriage	Non- teaching Occupations	Training and Other Schools	Retired and Others	Totals	Retained
1962-63	12,959	-216 +449 +233	-506 +403 -103	-86 +169 +83	-357 +1344 +987	-246 +17 -229	-1411 +2382 +971	11,548 13,930
1963-64	+ 971	-246 +470 +224	-516 +427 -89	-113 +171 +58	-430 +1513 +1083	-665 +401 -164	-1870 +2982 +1112	12,060 15,042
1964-65	+1,112	-345 +598 +243	-537 +541 +4	-82 +66 -16	-360 +1574 +1214	-324 +79 -245	-1648 +2858 +1210*	13,394 16,252
1965-66	+ 569*	-491 +434 -57	-88 +70 -18	-347 +1328 +981	-800 +284 -516	-2043 +2998 +955*	14,821 17,819	
1966-67	+1,328*	16,939						

¹ Losses of teachers according to D.B.S. statistics (1962-1964); Table X (1964-65); Report on Teacher Shortage and Recruitment (Department of Education, Mimeo., Oct. 1, 1966).

² Recruitment of teachers according to Sillito, op. cit., (1962-1964); Report on Teacher Recruitment (Department of Education, Mimeo., Oct. 15, 1965 and Oct. 1, 1966).

³ Staff reported by Superintendents' Operation Report (Department of Education, Mimeo., 1962 to 1966).

* No attempt was made to compromise theoretical and reported teacher gain.

unsatisfactory for other reasons rose from 180 to 270.^{44,45}

In summary, over the two-year period, an increase of 1,155 classrooms required an additional 1,900 teachers and increased the shortage of teachers from 1,116 to 1,411.

This study has not resolved the paradox of the teacher shortage.

Should the current trend of teacher loss and recruitment continue, the loss and recruitment of teachers to housekeeping and non-teaching vocations should approximately balance, recruitment from immigrants should substantially exceed emigration, and the supply from university graduates should continue to exceed the number of new positions created and the number of teachers who retire or leave for other reasons. If the enrollments to 1970 should decrease as Ayers predicted, and the number of new positions drop to the predicted 300 per year, the relative supply of teachers should be greatly increased. This study indicates that no assurance can be given that the shortage of teachers in rural areas will be decreased. The reports of teacher recruitment cited previously indicate that in 1966, counties, divisions and smaller independent districts recruited 2,070 teachers for a net gain of 29, while city districts recruited

⁴⁴Department of Education, "Report on Teacher Shortage," (Edmonton, October 1, 1965). (Mimeo-graphed).

⁴⁵Department of Education, "Report on Teacher Shortage and Recruitment," (Edmonton, October 15, 1966). (Mimeo-graphed).

2,537 teachers for a net gain of 711. This is one facet of the teacher supply problem in Alberta.

Teacher Qualifications

Several teacher and environmental characteristics were explored. This study indicates that many of those teachers permanently leaving service possess minimal teacher education and low numbers of years of teaching experience. Significant differences among subgroups of teachers were observed. While the diversity of differences precluded further generalizations, this study has shown that further detailed examination of subgroups comprising the teacher loss and recruitment groups is warranted. The study indicates that if sampling is considered in future studies, it would have to be undertaken with extreme care to ensure representativeness of the sample to the many unique dropout properties.

Problems of Investigating Dropouts

This study shows that the problems of teacher retention and dropout in Alberta form a complex mosaic of the widely varying problems unique to each individual school jurisdiction. It indicates that generalizations of the provincial situation from individual cases may be erroneous.

The experience of the investigator in completing this study indicates that information from dropouts can be successfully obtained only if it is collected at the time

of resignation, since dropouts are extremely difficult to trace after they have left service.

III. RECOMMENDATIONS

On the basis of the information and conclusions reported above, the investigator makes the following recommendations:

1. That school boards experiencing a chronic "shortage" of teachers seriously review, by an independent agent if necessary, the major areas of teacher dissatisfaction — living accommodation and community resources, opportunities for professional advancement, staff-administration conflicts, and teacher salaries — to determine the deficiencies of their jurisdictions resulting in high rates of teacher resignation and loss. The investigator suggests that the difficulties in recruiting and retaining teachers in some jurisdictions may not be resolved by a general increase in the provincial supply of teachers.
2. That the Faculties of Education seriously investigate alternative means of allowing teachers, especially those in rural areas, to up-grade their professional qualifications with minimal service time requirements so that teachers will not be required to experience a twelve-month lapse in service to undertake a seven-month period of full-time study.
3. That school boards, particularly in urban areas, investigate the feasibility of greater utilization of married

female teachers who are not in active teaching service, for part-time, paraprofessional, and similar duties which can be performed in the home environment or without undue interference with homemaking responsibilities, so that the supply of teachers in urban areas may be somewhat increased.

4. That the professional development department of the Alberta Teachers' Association make every effort to maintain contact with married female teachers experiencing lapses in service so that professional competence of the latter is not depreciated to the extent that such teachers feel inadequate or become unfit to resume service, and that a registry of such teachers be maintained.

5. That adequate records of teacher employment, mobility, and retention be kept in a manner amenable to modern data processing procedures so that quantitative and qualitative comparisons may be made of subgroups such as immigrants and emigrants, teachers leaving the profession for or entering from other vocations, teachers returning to full-time study, and others.

6. That the Alberta School Trustees Association jointly with the Alberta Teachers' Association and the Department of Education sponsor recruiting teams which would visit other provinces and countries to apprise potential immigrants of the teaching opportunities in this province, appraise the qualifications and character of applicants and provide or arrange for the necessary liaison between such persons and

potential employers.

IV. CONCLUSION

This study indicates that the problems associated with teacher supply are complex and vary so grossly from urban to rural regions and from one school system to another that generalizations of provincial teacher shortages must be made with caution. It has led to the conclusion that the reported provincial shortage of teachers may not be appreciably alleviated by reducing the number of dropouts since actual permanent loss of teachers due to dropout is minimal when dropouts are properly defined and delimited. The shortage may be decreased by attempting to decrease the lapses in active service for teachers continuing professional study and for some of the teachers returning to housekeeping.

This study suggests that the existing shortage of teachers may be eliminated in attractive school areas in the near future but that such optimism for the supply of teachers to unattractive areas may be unwarranted.

This study suggests that many of the dropouts possess minimal qualifications and may be those who might be replaced as better-qualified teachers become available.

Appreciable changes in any one of the sources of supply could play havoc with the crude balance that currently exists, and an adequate supply of teachers is

vulnerable to changes in staff utilization, pupil-teacher ratio, expansion of formal education to pre-school and adult continuing education and similar potential changes in the educational complex.

The problem of adequately staffing schools in rural areas seems to be one that will continue to challenge the ingenuity of responsible authorities for many years to come.

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APPENDIX A

PREPARATION OF THE QUESTIONNAIRE

PREPARATION OF THE QUESTIONNAIRE

Section A, Destination

One objective of the questionnaire was to determine as accurately as possible the destinations of teachers who resigned. A decision was made to adopt the categories for destinations used by D.B.S. in their previous reports. Accordingly, all teachers were asked to respond to the Section A.

The code number in the column on the right corresponded to those used by D.B.S. for each destination. Information on teacher mobility within the province was collected for the initial study. Earlier D.B.S. reports indicated fairly large portions of teachers in the "unknown" category. It was not possible to ascertain whether this became a miscellaneous category. Category 10 was provided so that any destinations not covered previously could be reported. It was intended that such an additional destination could become a separate category if the frequency of responses justified it. In the event that large numbers of teachers were changing to non-teaching vocations, category 5 requested the nature of the vocation so that follow-up studies would have some direction for their inquiry.

Section B, Withdrawal From Teaching

Various reasons for withdrawal were speculated and these items were included in Section B. Only those teachers

expecting to terminate active service were asked to respond.

Although more than one reason could apply to teachers withdrawing, the difficulties of interpreting data based on rank ordering were considered greater than such additional information would warrant. Item 1 was intended for those teachers being "promoted" to supervisory or consultant positions in education. Item 2 was provided for those teachers who were changing to non-teaching full-time vocations.

Item 3 was included for those teachers of small schools which faced centralization at centres not readily accessible to resident teachers, for those teachers whose services were considered unsatisfactory and who were being subtly pressured into resignations, and for those being affected by selective staffing policies. Since about six per cent of the teachers possess Letters of Authority, it was hypothesized that some teachers would lose their authority to teach and would respond to Item 4. It was hypothesized that some resident teachers would be dissatisfied with their teaching positions but were prevented from teaching elsewhere because of family or other obligations. Others were thought to become dissatisfied with teaching. Items 5 and 6 provided opportunities for these responses. The possibility of termination of teaching contracts after tenure had been achieved or termination after the probationary year existed, and Items 7 and 8 were included. In the event that some major categories had been overlooked, Item 9 provided an

open end to the section. If a specific response occurred with sufficient frequency, it could be included as an additional category. The categories were considered mutually exclusive although various items reflected a range from voluntary withdrawal to dismissal.

In transferring responses to data cards, three additional categories were established:

10. Married woman, housekeeping more important,
11. Married woman, pregnant,
12. Married woman, husband transferred elsewhere.

Section C, Intent for Future Service

Previous studies reported lapses in service for many teachers due to additional training or family obligations. Items 1 - 5 attempted to determine the time lapses anticipated. Tabulation of these responses were intended only for teachers undertaking housekeeping, teachers entering other vocations, and teachers resuming studies.

It was hoped that Items 6 - 8 would provide information on urban-suburban movement of married female teachers and on those teachers who used their year of further study as an avenue to obtain more desirable positions.

Section D, Dissatisfactions

All teachers who were resigning were requested to respond to the items of this section. The individual items were those commonly referred to in complaints by teachers

or reported in the literature. Although the categories were mutually exclusive, teachers responding to this section were invited to check as many of the items as they felt were pertinent.

Again, the question was open-ended to provide responses alternative to the specified list. During transfer of data from questionnaire responses to data cards many teachers expressed complete satisfaction with their positions. This category was added to the tabulations.

Section E, Purposes of Mobility

Previous reports indicated that teachers who experienced problems in one position generally resolved the problem by resigning and seeking a position elsewhere.

This section is relevant in this report only for teachers emigrating from the province. A general comparison of positions was requested. Individual items generally corresponded to removal of possible dissatisfaction of Section D.

Section F, Comments

Some complexity in receiving recommendations to resolve the problems causing dropouts was anticipated. Teachers were requested to provide frank criticisms of existing problems or to submit suggestions for improvement of the educational climate in Alberta. The following invitation was extended:

F. Please feel free to comment on conditions under which you would have continued service in your present location or under which you would consider resuming service in Alberta.

In summary, teachers were invited to respond to Sections A, D, and F, and to those of Sections B, C, or E which they felt applicable.

APPENDIX B

THE QUESTIONNAIRE

GOVERNMENT OF THE PROVINCE OF ALBERTA

DEPARTMENT OF EDUCATION

QUESTIONNAIRE: Teacher Mobility and Retention 1965

Please complete Items A, D, F, and those which are applicable of B, C, or E.

A. Please CHECK the item which will describe your occupation or activity for the school year 1965-66. (Check ONE item only).

1. Teaching for a different employer in Alberta	...	02
2. Teaching outside the Province of Alberta	...	03
3. Becoming married and starting housekeeping	...	04
4. Married woman returning to home duties	...	05
5. In a non-teaching occupation (please specify)	...	06
6. Taking further training (academic or professional)	...	07
7. Superannuated	...	08
8. Retiring due to illness	...	09
9. Teaching in a non-public school*	...	10
10. Other (please specify)	...	11

* Include Correspondence School Branch, Institute of Technology, private schools and colleges, special schools, etc., not part of a school district in the province.

B. If you are NOT CONTINUING teaching in Alberta, please CHECK the item which you consider most appropriate as the reason for your discontinuing teaching. (Check ONE item only).

1. Assuming a non-teaching position in education	...	1
2. Preferred to change to occupation not in education	...	2
3. Employment no longer available locally	...	3
4. Teaching certification or authority expired or lapsed	...	4
5. Dissatisfied with the particular teaching position held	...	5
6. Dissatisfied with teaching as an occupation	...	6
7. Was requested to resign	...	7
8. Contract was not renewed after probationary year	...	8
9. Other (please specify)	...	9

C. If you do not plan to teach in 1965-66, please CHECK the item which describes your intentions for teaching service in Alberta.

1. Resume in 1966-67	...	1
2. Resume in 1967-68	...	2
3. Resume later	...	3

4. Will not resume teaching in Alberta	...	4
5. Undecided	...	5

If resuming teaching, please check ONE of items following:

6. Expect to teach in present location for previous employer	...	7
7. Expect to teach in present location for new employer	...	8
8. Expect to teach in a new location	...	9

D. If you reported dissatisfaction with teaching or with your previous teaching position, please check each of the items which you feel contributed substantially to your decision to resign.

1. Overload of children in the classroom	...	1
2. Too many grades in the classroom	...	2
3. Unsatisfactory grade level assigned	...	3
4. Unsatisfactory subject areas assigned	...	4
5. Inadequate salary	...	5
6. Unsatisfactory living and community resources	...	6
7. No opportunity for advancement in that system	...	7
8. Personality conflict with staff or administration	...	8
9. Other (please specify) _____	...	9

E. If you intend to teach for a different employer in Alberta, in a non-public school, or outside the Province of Alberta, how will your future position compare with the one you held in 1964-65? Please check ONE.

1. More favorable	...	1
2. About the same	...	2
3. Less favorable	...	3

If MORE FAVORABLE, please check the items which apply to your future position.

4. Lighter work load	...	4
5. Higher salary	...	5
6. Better community resources	...	6
7. Better living conditions	...	7
8. Better opportunities for advancement	...	8
9. Grade level and/or subject area more suitable	...	9
10. Other comments _____	...	10

F. Please feel free to comment on conditions under which you would have continued service in your present location or under which you would consider resuming service in Alberta.

APPENDIX C

TEACHER'S REPORT

FIGURE NO. 1302-328

DEPARTMENT OF EDUCATION, ALBERTA, AND
DOMINION BUREAU OF STATISTICS
TEACHERS REPORT ON QUALIFICATIONS, SALARY, AND EXPERIENCE

SOLID BLOCKS ARE TO BE FILLED IN BY TEACHER

SEPTEMBER, 1964, PART I

A. SCHOOL												
1. School District	No.		Code No. of System									
2. Name of Division or County	No.		Div. or County									
3. Name of School (If more than one in school district)			City									
4. Post Office Address of School			Type									
5. Number of rooms in which classes are registered												
6. Number of full-time teachers (including the principal)												
7. Number of part-time teachers												
B. TEACHER												
Print name in full and indicate sex and marital status in the appropriate squares.			Sex	Male	<input type="checkbox"/> 1							
				Female	<input type="checkbox"/> 2							
			If lay teacher check marital status	Single	<input type="checkbox"/> 1							
				Married	<input type="checkbox"/> 2							
				Widowed separated	<input type="checkbox"/> 3							
			If member of an R. C. religious order (including secular priest) check here			<input type="checkbox"/> 4						
2. If you have University degree(s), state degree(s) and University(ies)												
Major field of study	Degree(s)	University(ies)										
(a) Education												
(b) Others including General												
3. Check Class of Teaching Certificate(s)												
Cert.	Int.	Perm.	Cert.	Int.	Perm.							
Professional	41	42	Jr. Cert.	37	38							
Academic	43	44	for H.S.	21	22							
High School	45	46	Jr. E.	23	24							
Standard "S"	31	32	First Class	12								
Standard "E"	33	34	Second									
Sr. E and I	35	36	Letter of Authority	95								
E and I	25	26										
B. Registered number of highest certificate held												
Special Certificate(s)												
(1)			(3)									
Act	64		Home	67								
Dramatics	80		Economics									
Music	63		Industrial	65								
Phys. Ed.	68		Automotives									
(2)			Electricity	90								
Bookkeeping			Metalwork									
Tenography			Woodwork									
Typewriting			Other:									
Business Ed.												
Commercial Subjects												
4. Teaching Certif. of ANOTHER Province or Country												
(a) Name of Highest Certificate												
(b) Name of Province or Country												
(c) How many years did you teach in the Province or Country												
5. Teaching or supervising position (Mark ONE position only):												
Spending more than half time in administration												
Spending more than half time teaching												
(a) Principal (or head teacher) of one (or two) schools												
(b) Supervising principal of more than two schools												
(c) Vice principal of a school												
(d) Department head (secondary schools only)												
(e) Regular classroom teacher (includes teachers in one-room schools)												
(f) Relieving teacher on yearly salary (not per diem)												
(g) Teacher of special subject or class												
(h) Supervisor or consultant for special subject or classes												
(i) (g) or (h) state specialty Such as industrial arts, home economics, kindergarten, music, art, library, guidance counselor, etc.												
(k) All others -- give title of position												
Check time spent in teaching: <input type="checkbox"/> 50% or more <input type="checkbox"/> Less than 50%												
6. Circle grade or grades												
You teach		Kgn	1	2	3	4	5	6	Aux.			
or		7	8	9	10	11	12	Spec.				
Supervise		Kgn	1	2	3	4	5	6	Aux.			
		7	8	9	10	11	12	Spec.				
7. (a) If you are in charge of a class register give enrollment in class												
Gr. 1 2 3 4 5 6 7 8 9 10 11 12												
No.												
8. Years of Teaching Experience to end of last June: (Ten months of teaching equal one school year or as provided in your schedule)												
Years Mos												
(a) With this School Board												
(b) Elsewhere in this Province												
(c) Outside this Province												
(d) Total years of Teaching Experience (Must equal (a) + (b) + (c))												
(e) Date commenced with present Board												
(f) Date terminated last employment												
9. (a) Annual salary (before any deductions) according to scale in effect in September and including Cost of Living Bonus, if any.												
(b) Present salary if schedule under negotiation												
C. CHECK item which describes your occupation or activity of LAST school year. (Check ONE item only)												
1. Teaching (a) for your present School Board												
(b) elsewhere in this Province												
(c) outside this Province												
2. Attending faculty of Education												
3. Attending high school, university or other educational institution												
4. Housekeeping												
5. Other: (specify)												
D. (a) If another teacher held your present position last June CHECK his or her present occupation or activity (Check ONE item only)												
1. Transferred to another teaching position under the same School Board												
2. Resigned to teach (a) Elsewhere in this Province (b) Outside this Province												
3. Left to be married												
4. Married woman returned to home duties												
5. In a non-teaching occupation												
6. Taking further training (academic or professional)												
7. Salaried												
8. Sick												
9. Died												
10. Other destination not listed above												
11. Unknown												
(b) If your present teaching position is a new one that did not exist last year (e.g. a new classroom or school) check here												
E. 1. (a) If member of a religious order, give name under which your Alberta certificate was issued												
(b) If married woman give maiden name												
2. Date of birth												
Day Month Year												
3. Address												
Telephone No.												
4. Home Address if different from above												
Telephone No.												
5. Give number of dependents: (Income Tax)												
6. Years of Education beyond Alberta Grade XI												
(a) High school year beyond Alberta Grade XI												
(b) University: (1) Teacher education (e.g. B.Ed., M.Ed., etc.)												
(2) Other degree programs												
(c) Teachers' College (or Normal School) - if not included in (b) above												
(d) Other (Specify)												
Total years												
(e) Total years of teacher education beyond Alberta Grade XI for which you are being paid. (This method of reporting is necessary to get uniformity across Canada)												
7. Do you wish to receive the A.T.A. Magazine? (necessary for special mailing rates)												
Yes <input type="checkbox"/> No <input type="checkbox"/>												
Signature of Teacher												
Total												

Signature of Teacher _____ Date _____, 1964.

APPENDIX D

FREQUENCY DISTRIBUTION TABLES

TABLE D.1

FREQUENCY DISTRIBUTION OF DESTINATIONS OF TEACHERS WHO RESIGNED IN ALBERTA IN 1965, FOR EACH TYPE OF SCHOOL SYSTEM, AND EXTRAPOLATIONS (*)

Destination	Type of School System			Provincial Total
	Large City	County & Division	Other Districts	
Teaching elsewhere in Province	78 (107)	450 (551)	177 (236)	705 (893)
Returning for full-time study	41 (56)	166 (204)	75 (100)	282 (360)
Undertaking housekeeping	85 (117)	215 (264)	117 (156)	417 (537)
Transferring to non-teaching occupation	12 (16)	31 (38)	21 (28)	64 (82)
Retiring due to illness or superannuating	14 (19)	52 (64)	28 (37)	94 (120)
Leaving to teach outside Alberta	61 (84)	101 (124)	103 (137)	265 (345)
Other destinations	48 (66)	54 (66)	27 (36)	129 (168)
Unknown	3 (4)	17 (21)	8 (11)	28 (36)
Total	342 (469)	1086 (1332)	551 (740)	1984 (2541)

TABLE D.2

FREQUENCY DISTRIBUTION OF REASONS FOR RESIGNATION GIVEN BY DROPOUTS EMIGRATING FROM THE PROVINCE

Reason	Type of School System			Provincial Total
	Large City	County & Division	Other	
In Education				
But Not Teaching	-	-	-	-
Changing To Non-Education Vocation	-	-	-	-
Local Employment Terminated By Employer	-	-	1	1
Certificate Lapsed	-	6	5	11
Dissatisfaction With Position Or Profession	6	16	12	34
Married, Housekeeping More Important	-	-	-	-
Married, Pregnant	-	-	-	-
Married, Husband Transferred Elsewhere	16	23	17	56
Other	28	30	44	102
Not Reported	11	26	24	61
Total Responses	61	101	103	265

TABLE D.3

FREQUENCY DISTRIBUTION OF REASONS FOR RESIGNATION GIVEN BY DROPOUTS UNDERTAKING HOUSEKEEPING

Reason	Type of School System			
	Large City	County & Division	Others	Province
In Education But Not Teaching	1	4	6	11
Changing To Non-Education Vocation	4	8	3	15
Local Employment Terminated By Employer	-	4	1	5
Certificate Lapsed	2	9	6	17
Dissatisfaction With Position Or Profession	2	12	3	17
Married, Housekeeping More Important	19	69	23	111
Married, Pregnant	2	4	8	14
Married, Husband Transferred Elsewhere	12	13	13	38
Other	8	12	8	28
Not Reported	35	80	46	161
Total Responses	85	215	117	417

TABLE D.4

FREQUENCY DISTRIBUTION OF REASONS FOR RESIGNATION GIVEN BY DROPOUTS TRANSFERRING TO OTHER VOCATIONS

Reason	Type of School System			
	Large City	County & Division	Others	Province
In Education				
But Not Teaching	1	-	2	3
Changing To Non-Education Vocation	6	12	8	26
Local Employment Terminated By Employer	-	1	1	2
Certificate Lapsed	1	2	-	3
Dissatisfaction With Position Or Profession	3	12	5	20
Married, Housekeeping More Important	-	1	-	1
Married, Pregnant	-	-	-	-
Married, Husband Transferred Elsewhere	-	-	1	1
Other	1	2	3	6
Not Reported	-	1	1	2
Total Responses	12	31	21	64

TABLE D.5

 FREQUENCY DISTRIBUTION OF REASONS FOR DROPOUT GIVEN BY
 EMIGRANTS, HOUSEKEEPERS AND TEACHERS
 ENTERING OTHER VOCATIONS

Reason	Destination of Dropout			Total
	Emigrants	Housekeepers	Other Vocations	
In Education				
But Not Teaching	-	11	3	14
Changing To Non-Education Vocation	-	15	26	41
Local Employment Terminated By Employer	1	5	2	8
Certificate Lapsed	11	17	3	31
Dissatisfaction With Position Or Profession	34	17	20	71
Married, Housekeeping More Important	-	111	1	112
Married, Pregnant	-	14	-	14
Married, Husband Transferred Elsewhere	56	38	1	95
Other	102	28	6	136
Not Reported	61	161	2	224
Total Responses	265	417	64	746

TABLE D.6

FREQUENCY DISTRIBUTION OF DROPOUTS EMIGRATING FROM THE PROVINCE ACCORDING TO REPORTED DISSATISFACTIONS

Dissatisfactions	Type of School System			
	Large City	County & Division	Others	Province
None	10	11	12	33
Overload of Children	4	4	3	11
Too Many Grades	5	3	1	9
Unsatisfactory Grade Level	3	4	4	11
Unsatisfactory Subject Area	4	5	5	14
Inadequate Salary	3	10	6	19
Unsatisfactory Living and Community Resources	-	19	7	26
No Opportunity For Advancement	3	8	9	20
Staff-Administration Conflict	5	5	4	14
Other	1	7	9	17
Number of Possible Responses	61	101	103	265

TABLE D.7

FREQUENCY DISTRIBUTION OF DROPOUTS UNDERTAKING HOUSEKEEPING
ACCORDING TO REPORTED DISSATISFACTIONS

Dissatisfactions	Type of School System			
	Large City	County & Division	Others	Province
None	18	31	14	63
Overload of Children	4	6	3	13
Too Many Grades	-	4	3	7
Unsatisfactory Grade Level	-	2	3	5
Unsatisfactory Subject Area	1	6	1	8
Inadequate Salary	2	4	4	10
Unsatisfactory Living and Community Resources	-	3	1	4
No Opportunity For Advancement	1	-	1	2
Staff-Administration Conflict	3	6	5	14
Other	2	2	3	7
Number of Possible Responses	85	215	117	417

TABLE D.8

FREQUENCY DISTRIBUTION OF DROPOUTS LEAVING FOR OTHER VOCATIONS ACCORDING TO REPORTED DISSATISFACTIONS

Dissatisfaction	Type of School System			
	Large City	County & Division	Others	Province
None	1	2	1	4
Overload of Children	2	3	2	7
Too Many Grades	-	-	2	2
Unsatisfactory Grade Level	-	1	-	1
Unsatisfactory Subject Area	-	1	2	3
Inadequate Salary	3	5	3	11
Unsatisfactory Living and Community Resources	1	1	3	5
No Opportunity For Advancement	1	1	1	3
Staff-Administration Conflict	1	2	3	6
Other	2	6	2	10
Number of Possible Responses	12	31	21	64

TABLE D.9

FREQUENCY DISTRIBUTION OF EMIGRANTS, HOUSEKEEPERS, AND TEACHERS LEAVING FOR OTHER VOCATIONS ACCORDING TO REPORTED DISSATISFACTIONS

Dissatisfactions	Destination of Dropout			Total
	Emigrants	Housekeepers	Other Vocations	
None	33	63	4	100
Overload of Children	11	13	7	31
Too Many Grades	9	7	2	18
Unsatisfactory Grade Level	11	5	1	17
Unsatisfactory Subject Area	14	8	3	25
Inadequate Salary	19	10	11	40
Unsatisfactory Living and Community Resources	26	4	5	35
No Opportunity For Advancement	20	2	3	25
Staff-Administration Conflict	14	14	6	34
Other	17	7	10	34
Number of Possible Responses	265	417	64	746

TABLE D.10

EXPECTED LAPSE IN SERVICE FOR DROPOUTS
UNDERTAKING HOUSEKEEPING

Duration of Expected Lapse In Service	Type of School System			
	Large City	County & Division	Others	Province
One Year	2	13	8	23
Two Years	1	3	1	5
More Than Two Years	32	53	30	115
Permanent	13	19	12	44
Undecided	29	108	53	190
Unknown	8	19	13	40
Total	85	215	117	417

TABLE D.11
INTENT FOR FUTURE SERVICE BY HOUSEKEEPERS

Employer And Location	Type of School System			
	Large City	County & Division	Others	Province
Same Employer, Same Location	25	49	22	96
New Employer, Same Location	1	4	2	7
New Employer, New Location	6	7	13	26
Total Responses	85	215	117	417

TABLE D.12

EXPECTED LAPSE IN SERVICE FOR DROPOUTS RETURNING
FOR FURTHER STUDY

Duration of Expected Lapse In Service	Type of School System			
	Large City	County & Division	Others	Province
One Year	7	72	24	103
Two Years	4	15	3	22
More Than Two Years	5	18	8	31
Permanent	7	11	6	24
Undecided	16	42	27	85
Unknown	2	8	6	16
Total Responses	40	166	75	281

TABLE D.13

INTENT FOR FUTURE SERVICE BY DROPOUTS RETURNING
TO FURTHER STUDY

Employer and Location	Type of School System			
	Large City	County & Division	Others	Province
Same Employer, Same Location	12	27	10	49
New Employer, Same Location	-	1	-	1
New Employer, New Location	23	62	37	122
Total Responses	40	166	75	281

TABLE D.14

FREQUENCY DISTRIBUTION OF DROPOUTS BY DESTINATIONS
ACCORDING TO YEARS OF TEACHER EDUCATION

Destination	Years of Teacher Education							
	1	2	3	4	5	6	Not Reported	
Full-Time Study	65	98	20	52	8	10	29	
Housekeeping	178	86	29	41	12	2	69	
Other Vocation	20	12	4	13	1	3	11	
Retired, etc.	59	11	1	10	5	2	6	
Emigrating	62	49	27	49	26	18	34	
Other Destinations	34	32	8	45	11	10	17	
Total	418	288	89	210	63	45	166	
Provincial Force+ 1965	% N	18.72 2759	23.77 3505	14.63 2157	13.92 2053	15.15 2233	9.57 1511	4.24 625

+ From Sillito, op. cit., Table 4.2, p. 15.

TABLE D.15

FREQUENCY DISTRIBUTION OF DROPOUTS BY YEARS OF PREVIOUS
TEACHING EXPERIENCE AND ACCORDING TO
TYPE OF SCHOOL SYSTEM

Years of Previous Experience	Type of School System			Total	Province* 1964-65 (Equated to 10,000)
	Large City	County & Division	Other Districts		
0	1	7	5	13	1,468
1	44	69	33	146	
2	26	53	42	121	698
3 - 5	47	125	73	245	1,584
6 - 9	30	95	56	181	1,470
10-14	17	118	32	167	1,533
15+	26	112	49	187	3,247
Unknown	73	57	89	219	
Total	264	636	379	1279	10,000

* From Sillito, op. cit., Table A.3, p. 38.

TABLE D.16

FREQUENCY DISTRIBUTION OF DROPOUTS BY SEX AND FEMALE
MARITAL STATUS ACCORDING TO DESTINATION

Destination	Sex and Female Marital Status				
	Male	Single Female	Married Female	Other*	Not Reported
Full-Time Study	129 (93)	66 (43)	56 (97)	1 (21)	32
Housekeeping	7	37	305	3	71
Other Vocations	27	15	11	-	11
Retired	13	11	38	25	18
Emigrating	85 (82)	84 (38)	48 (86)	17 (19)	31
Other Destinations	47	37	40	17	16
Total	308	244	498	63	1113

1965
Provincial % 36.8 17.1 38.3 8.4 -
Force**

* Widowed, divorced, separated, or members of religious orders.

** From Sillito, op. cit., Table 3.4, pp. 9-10.

() Indicates expected numbers according to provincial proportions for those dropouts for whom data were available.

TABLE D. 17

FREQUENCY DISTRIBUTION OF DROPOUTS BY AGE AND ACCORDING TO DESTINATION

Destination	Age						Not Reported	Total
	Under 26	26-35	36-45	46-55	56-65	66+		
Full-Time Study	140	71	19	10	1	2	39	282
Housekeeping	115	127	42	34	20	1	77	416
Other Occupations	22	15	9	3	1	-	14	64
Retired, etc.	2	2	7	10	38	27	8	94
Emigrants	94	71	34	21	5	-	40	265
Other Destinations	33	50	20	12	17	4	21	157
Total	406	336	131	90	82	34	199	1278
Provincial Force*	N	2823	3733	3007	3027	1881	157	115
	%	19.2	25.3	20.4	20.6	12.8	1.04	0.8

* From Sillito, op. cit., Table A.1, p. 36.

TABLE D.18

FREQUENCY DISTRIBUTION OF DROPOUTS ACCORDING TO SIZE OF SCHOOL IN WHICH DROPOUTS TAUGHT AND ACCORDING TO TYPE OF SCHOOL SYSTEM

Size of School (Number of Classrooms)	Type of System			No. of Prov. Schools*
	Large City	County & Division	Others	
1	-	15	-	15
2 - 3	-	25	4	29
4 - 6	7	51	22	80
7 - 9	14	78	36	128
10 - 15	61	207	104	372
16 or More	158	191	138	487
Not Reported	24	69	75	168
Total	264	636	379	1279
				1340

* From the 1965 Annual Report, op. cit., Table I, p. 191. This column is provided for information only and is not relevant to the size of school in which teachers taught except for the first row.

TABLE D.19

FREQUENCY DISTRIBUTION OF DROPOUTS ACCORDING TO GRADE LEVELS
 AT WHICH DROPOUTS TAUGHT AND ACCORDING TO
 TYPE OF SCHOOL SYSTEM

Grade Level	Type of School System			Total
	Large City	County & Division	Others	
Elementary	121	277	170	568
Secondary	103	247	119	469
Elementary-Secondary	3	27	12	42
Not Reported	37	85	78	200
Total	264	636	379	1279

TABLE D.20

FREQUENCY DISTRIBUTION OF DROPOUTS ACCORDING TO TYPE
OF SCHOOL SYSTEM AND TYPE OF POSITION

Type of Position	Type of System			Total	Per Cent Distribution In Province*
	Large City	County & Division	Others		
Principal	12	51	19	82	8.40
Vice-Principal	7	23	14	44	5.79
Regular Teacher	210	498	276	984	85.82
Total Reported	229	572	309	1110	
Unknown	35	64	70	169	
Totals	264	636	379	1279	

* From Sillito, op. cit., Table 6.1, p. 31.

TABLE D.21

1964 OCCUPATION OF TEACHER DROPOUTS ACCORDING TO
DESTINATION IN 1965

1965 Destination	Occupation in 1963-64*						Total
	1	2	3	4	5	6	
Full-Time Study	170	15	58	3	5	31	282
Housekeeping	245	9	14	71	8	70	417
Other Vocations	34	5	7	2	3	13	64
Retired, etc.	81	1	-	4	-	8	94
Emigrants	136	40	48	1	6	34	265
Other Destinations	89	9	34	3	6	16	157
Total	755	79	161	84	28	172	1279
Province**	N	12150	470	1513	427	171	2 14743
	%	82.48	3.19	10.26	2.90	1.16	0.01 100.0

- * 1. Teaching in the province
- 2. Teaching outside the province
- 3. University or school studies
- 4. Housekeeping
- 5. Other
- 6. Not reported

** From Sillito, op. cit., Table 5.5, p. 28.

APPENDIX E

CONTINGENCY TABLES AND VALUES OF CHI SQUARE

TABLE E.1

CONTINGENCY TABLE OF OBSERVED AND EXPECTED DISTRIBUTION OF YEARS OF TEACHER EDUCATION OF DROPOUTS CATEGORIZED ACCORDING TO DESTINATION

Destination	Number of Years of Teacher Education						Total
	1	2	3	4	5	6	
Full-Time Study	65 (49)*	98 (63)	20 (39)	52 (37)	8 (40)	10 (25)	253
Housekeeping	178 (68)	86 (86)	29 (53)	41 (50)	12 (55)	2 (35)	348
Other Vocations	20 (10)	12 (13)	4 (8)	13 (8)	1 (8)	3 (5)	53
Retired	59 (17)	11 (22)	1 (13)	10 (13)	5 (14)	2 (9)	88
Emigrants	62 (45)	49 (57)	27 (35)	49 (33)	26 (36)	18 (23)	231
Other Destinations	34 (27)	32 (35)	8 (21)	45 (20)	11 (22)	10 (14)	140
All Dropouts	418 (216)	288 (276)	89 (169)	210 (161)	63 (175)	45 (111)	1113
Provincial Force	%	19.5	24.8	15.3	14.5	15.8	10.0

* Note: The expected frequencies were calculated as if the distribution of years of teacher education for each category of dropout and for the total dropout population was proportional to that of the provincial teaching force, e.g. 49 is 19.5 per cent of 253. Slight discrepancies in totals are the result of errors due to rounding-off.

TABLE E.2

SUMMARY OF VALUES OF CHI SQUARE CALCULATED FOR
DATA OF TABLE E.1

Dropout Destination	Years of Training						Value of χ^2
	1	2	3	4	5	6	
Full-Time Study	5.23	19.44	9.26	6.08	12.09	9.00	61.10
Housekeeping	177.94	0	10.87	1.62	33.62	31.11	255.16
Other Vocations	10.00	0.08	2.00	3.13	6.01	.80	22.12
Retired, etc.	103.76	5.50	11.08	0.69	7.01	5.44	133.48
Emigrants	6.43	1.12	1.83	7.75	2.78	1.09	21.00
Other Destinations	1.81	0.26	8.04	31.25	5.50	1.14	48.01
All Dropouts	188.91	.52	37.87	14.91	71.68	39.24	353.13

For Total χ^2 , d.f. = 5
 $\chi^2 .05 = 11.07$ For each cell, d.f. = 1
 $\chi^2 .05 = 3.84$

TABLE E.3

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF YEARS OF TEACHING EXPERIENCE OF DROPOUTS, AND CALCULATED VALUES OF CHI SQUARE FOR DATA OF TABLE D.15

Years of Previous Experience	Observed Frequency	Expected Frequency	Value of Chi Square
0 - 1	159	156	.06
2	121	74	29.85
3 - 5	245	168	35.29
6 - 9	181	156	4.01
10 - 14	167	162	.15
15+	187	344	71.65
Totals	1060	1060	$\chi^2 = 141.01$

$$d.f. = 5$$

$$\chi^2 .05 = 11.07$$

$$d.f. = 1$$

$$\chi^2 .05 = 3.84$$

TABLE E.4

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF SEX AND FEMALE MARITAL STATUS FOR DROPOUTS, AND CALCULATED VALUES OF CHI SQUARE FOR DATA FROM TABLE D.16

Sex and Female Marital Status	Observed Frequency	Expected Frequency	Value of Chi Square
Male	308	403	22.39
Single Female	244	190	15.35
Married Female	498	426	12.17
Other Female*	63	93	9.68
Totals	1113	1112	$\chi^2 = 59.59$

d.f. = 3

$\chi^2 .05 = 7.82$

d.f. = 1

$\chi^2 .05 = 3.84$

* Widowed, divorced, separated, or members of religious orders.

TABLE E.5

VALUES OF CHI SQUARE FOR DIFFERENCES IN DISTRIBUTION BY
 SEX AND FEMALE MARITAL STATUS BETWEEN SELECTED
 CATEGORIES OF DROPOUTS AND THE PROVINCIAL
 TEACHING FORCE FOR DATA FROM TABLE D.16

Category of Dropout	Sex and Female Marital Status				Total Value of χ^2
	Male	Female	Single	Married	
Full-Time Study	15.87	12.30	17.33	19.05	64.55
Emigrating	0	48.40	18.89	.45	67.74
d.f. = 3			d.f. = 1		
$\chi^2 .05 = 7.82$			$\chi^2 .05 = 3.84$		

TABLE E.6

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF AGE FOR DROPOUTS, AND CALCULATED VALUES OF CHI SQUARE FOR DATA FROM TABLE D.17

Age Ranges	Observed Frequency	Expected Frequency	Chi Square
Under 25	406	208	188.49
26 - 35	336	275	13.53
36 - 45	131	222	37.30
46 - 55	90	225	81.00
56 - 65	82	138	22.72
66+	34	11	48.09
Totals	1079	1079	$\chi^2 = 391.13$

d.f. = 5

$\chi^2_{.05} = 11.07$

d.f. = 1

$\chi^2_{.05} = 3.84$

TABLE E.7

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES IN TYPES OF TEACHING POSITIONS OF DROPOUTS, AND CALCULATED VALUES OF CHI SQUARE FOR DATA FROM TABLE D.20

Type of Position	Observed Frequency	Expected Frequency	Chi Square
Principal	82	93	0.87
Vice-Principal	44	64	6.25
Regular Teacher	984	953	0.46
Totals	1110	1110	$\chi^2 = 7.58$

d.f. = 2

$\chi^2 .05 = 5.99$

d.f. = 1

$\chi^2 .05 = 3.84$

TABLE E.8

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF
PREVIOUS SERVICE OF DROPOUTS, AND CALCULATED VALUES
OF CHI SQUARE FOR DATA FROM TABLE D.21

1963-64 Occupation	Observed Frequency	Expected Frequency	Chi Square
Teaching in the Province	755	913	27.34
Teaching Outside the Province	79	35	55.34
University or School Study	161	114	19.38
Housekeeping	84	32	84.50
Other Occupations	28	13	17.31
Totals	1107	1107	$\chi^2 = 203.87$

d.f. = 4

 $\chi^2 .05 = 9.49$

d.f. = 1

 $\chi^2 .05 = 3.84$

TABLE E.9

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF
 TEACHER RESIGNATIONS, AND CALCULATED VALUES OF CHI
 SQUARE FOR DATA FROM TABLE VI

Type of System	Teacher Population	Observed Resignations	Expected Resignations	Chi Square
LC	4,959	469	847	168.69
CD	6,127	1,332	1,047	77.58
OD	3,784	740	647	13.38
Totals	14,870	2,541	2,541	$\chi^2 = 259.65$

d.f. = 2

 $\chi^2 .05 = 5.99$

d.f. = 1

 $\chi^2 .05 = 3.84$

TABLE E.10

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF DROPOUT, AND CALCULATED VALUES OF CHI SQUARE FOR DATA FROM TABLE VII

Type of System	Teacher Population	Observed Dropouts	Expected Dropouts	Chi Square
LC	4,959	362	550	64.26
CD	6,127	781	679	15.32
OD	3,784	505	419	17.65
Totals	14,870	1,648	1,648	$\chi^2 = 97.23$

d.f. = 2

$\chi^2 .05 = 5.99$

d.f. = 1

$\chi^2 .05 = 3.84$

TABLE E.11

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF
DESTINATIONS OF DROPOUTS ACCORDING TO TYPE OF
SCHOOL SYSTEM

Destinations	Type of System			
	Large City	County & Division	Other Districts	Province
Full-Time Study	56 (79)	204 (171)	100 (110)	360
Housekeeping	117 (118)	264 (254)	156 (165)	537
Other Vocations	16 (18)	38 (39)	28 (25)	82
Retirement, etc.	19 (26)	64 (57)	37 (37)	120
Emigrants	84 (76)	124 (163)	137 (106)	345
Other	70 (45)	87 (97)	47 (62)	204
Totals	362	781	505	1648

TABLE E.12

SUMMARY OF THE CALCULATED VALUES OF CHI SQUARE FOR
DATA OF TABLE E.11

Destination	Type of System		
	LC	CD	OD
Full-Time Study	6.70	10.81	.91
Housekeeping	.01	.39	.49
Other Vocations	.22	.03	.36
Retirement, etc.	1.88	.86	.00
Emigrants	.84	9.33	9.06
Other Destinations	13.89	1.03	3.63
Totals	23.54	22.45	14.45

d.f. = 5

$\chi^2 .05 = 11.07$

d.f. = 1

$\chi^2 .05 = 3.84$

TABLE E.13

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCY
 DISTRIBUTION OF TEACHER RECRUITMENT BY LARGE CITY
 SYSTEMS, AND CALCULATED VALUES OF CHI SQUARE
 FOR DATA OF TABLE XV

Category	Observed Recruitment	Expected Recruitment	Chi Square
Full-Time Study	729	569	44.99
Housekeeping	97	196	50.01
Other Vocations	20	24	.67
Immigrants	170	216	9.80
Other	18	29	4.17
Totals	1034	1034	$\chi^2 = 109.64$

d.f. = 4

 $\chi^2 .05 = 9.49$

d.f. = 1

 $\chi^2 .05 = 3.84$

TABLE E.14

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCY
 DISTRIBUTION OF TEACHER RECRUITMENT BY COUNTIES
 AND DIVISIONS, AND CALCULATED VALUES OF CHI
 SQUARE FOR DATA OF TABLE XVI

Category	Observed Recruitment	Expected Recruitment	Chi Square
Full-Time Study	485	659	45.94
Housekeeping	315	227	34.11
Other Vocations	34	28	1.29
Immigrants	316	250	17.42
Other	47	33	5.85
Totals	1197	1197	$\chi^2 = 104.61$

d.f. = 4

 $\chi^2 .05 = 9.49$

d.f. = 1

 $\chi^2 .05 = 3.84$

TABLE E.15

CONTINGENCY TABLE OF OBSERVED AND EXPECTED FREQUENCIES OF
RE-EMPLOYMENT FOR TEACHERS RETURNING TO STUDY,
ACCORDING TO TYPE OF SCHOOL SYSTEM

Place of Re-employment	Type of System			Province
	Large City	County & Division	Other Districts	
Same Employer, Same Location	12 (7.0)	27 (28.9)	10 (13.1)	49
New Employer	5 (15.5)	76 (64.2)	28 (29.2)	109
Not Reported	23 (17.4)	71 (71.8)	37 (32.7)	122
Totals	40	165	75	280

TABLE E.16

SUMMARY OF THE CALCULATED VALUES OF CHI SQUARE FOR
DATA OF TABLE E.15

Expectations	Type of System		
	LC	CD	OD
Same Employer, Location	3.57	.12	.73
New Employer, Location	7.11	2.17	.05
Not Reported	1.80	1.34	.57
Chi Square	12.48	3.63	1.35
d.f. = 2		d.f. = 1	
$\chi^2 .05 = 5.99$		$\chi^2 .05 = 3.84$	

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